CFD-676/777

SERVICE MANUAL

US Model

CFD-676/777

Canadian Model

CFD-676

Photo : CFD-676

CD Section	Model Name Using Similar Mechanism	CFD-616
	CD Changer Block Type	CH-D616-115
	CD Mechanism Type	KSM-213BCN
	Base Unit Name	KSS-213B/KN
TC Section	Model Name Using Similar Mechanism	CFD-560
	Tape Transport Mechanism Type	MF-D777-64G

SPECIFICATIONS

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION

With 4-ohm loads, both channel driven from 70 - 20,000 Hz; rated 10 W per channel-minimum RMS power, with no more than 10 % total harmonic distortion in AC operation.

Other Specifications

CD player section

System
Compact disc digital audio system
Laser diode properties
Material: GaAlAs
Wave length:780 nm
Emission duration: Continuous
Laser output: Less than 44.6 µW (This output is the value measured at a distance of about 200 mm from the objective lens surface on the optical pick-up block with 7 mm aperture.)
Spindle speed
200 r/min (rpm) to 500 r/min (rpm) (CLV)
Number of channels
2
Frequency response
20 - 20,000 Hz +0.5/–2 dB
Wow and flutter
Below measurable limit

Radio section

Frequency range
FM: 87.6 - 108 MHz
AM: 530 - 1,710 kHz
Aerials
FM: Telescopic aerial
AM: Built-in ferrite bar aerial

Cassette-corder section

Recording system
4-track 2 channel stereo
Fast winding time
Approx. 140s (sec.) with Sony cassette C-60
Frequency response
TYPE I (normal): 80 - 10,000 Hz

—Continued on next page—

使用時は添付資料も参照のこと
Refer to the additional documents.

CD RADIO CASSETTE-CORDER

SONY®

General

Speaker
- Full range: 10 cm (4 in.) dia., cone type
- Tweeter: 2 cm (⅝ in.) dia.

Inputs
- Mixing microphone input jack (minijack):
- Sensitivity 2.45 mV
- For low impedance microphone

Outputs
- Headphones jack (stereo minijack)
- For 32 ohms impedance headphones

Power output (excluding US model)
- 10 W + 10 W (at 4 ohms, 10 % harmonic distortion)

Power requirements
- For CD radio cassette-corder:
- 120 V AC, 60 Hz
- For memory back-up:
- 6 V DC, 4 size AA (R6) batteries
- For remote commander:
- 3 V DC, 2 size AA (R6) batteries

Power consumption
- AC 35 W

Dimensions
- approx. 678 × 296 × 308 mm (w/h/d)
- (26 ¾ × 11¾ × 12 ¼ inches (incl. projecting parts)

Mass
- approx. 10.6 kg (23 lb. 6 oz) (incl. batteries)

Supplied accessories
- AC power cord (1)
- Remote commander RMT-C777 (1)

Design and specifications are subject to change without notice.

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic breakdown because of the potential difference generated by the changed electrostatic load, etc. on clothing and the human body.

During repair, pay attention to electrostatic breakdown and also use the procedure in the printed matter which is included in the repair parts.

The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe more than 25cm away from the objective lens.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety check before releasing the set to the customer :

Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampers.).

Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

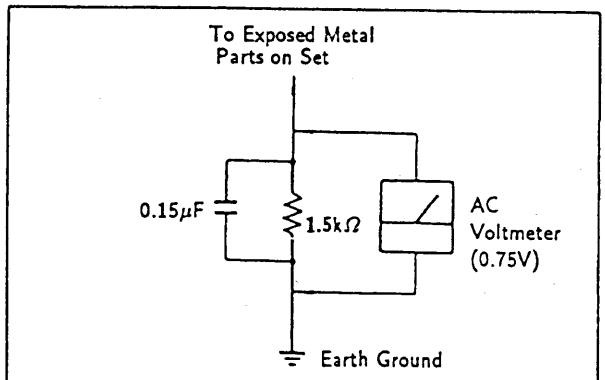

Fig. A. Using an AC voltmeter to check AC leakage.

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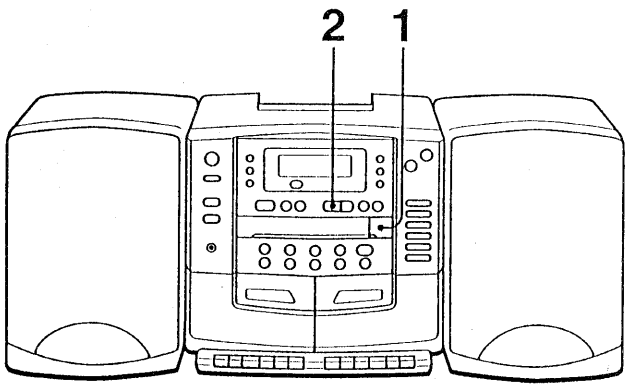
SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

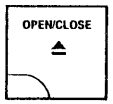
LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

Playing a CD



For hookup instructions, see pages 28 - 29.

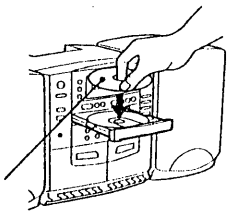
1



Press ≜ OPEN/CLOSE (direct power-on) and place the disc on the disc tray.

Note

You can't play 3 inch (8 cm) CDs even with an adaptor for single-CDs.

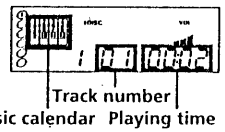


2

Press ►II.

The disc tray closes and the player plays all the tracks once.

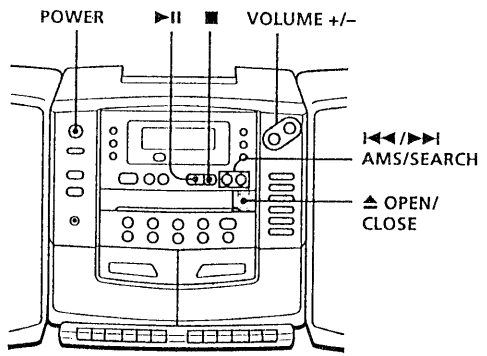
Display



Tips

- If "ALL DISCS" lights up, the player plays other CDs in numerical sequence. To play only one CD, press DISC MODE to select "1 DISC."
- Next time you want to listen to a CD, just press ►II. The player turns on automatically and starts playing the CD.

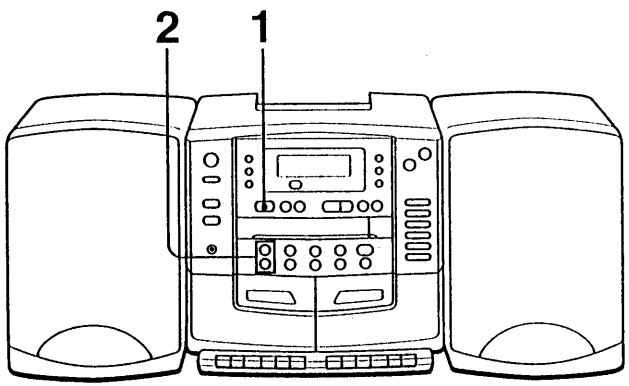
Use these buttons for additional operations



To	Press
Adjust the volume	VOLUME +/–
Stop playback	■
Pause playback	►II Press again to resume play after pause.
Go to the next track	►►I AMS/SEARCH
Go back to the previous track	I◄◄ AMS/SEARCH
Remove the CD	≜ OPEN/CLOSE
Turn on/off the player	POWER

This section is extracted from instruction manual.

Listening to the radio

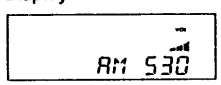


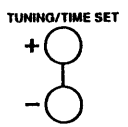
For hookup instructions, see pages 28 - 29.

1

Press BAND until the band you want appears in the display (direct power-on).

Display



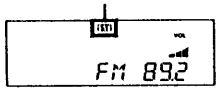
2 

Hold down TUNING/TIME SET+ until the frequency digits begin to change in the display.

The player automatically scans the radio frequencies and stops when it finds a clear station.

If you can't tune in a station, press the button once at a time.

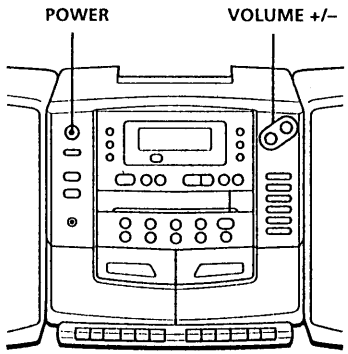
Indicates an FM stereo broadcast.



Tips

- If the FM broadcast is noisy, press PLAY MODE/MONO/ST until "Mono" appears in the display and the radio will play in monaural.
- Next time you want to listen to the radio, just press the BAND button. The player turns on automatically and starts playing the previous station.

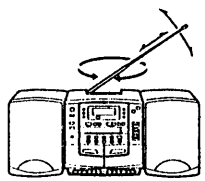
Use these buttons for additional operations



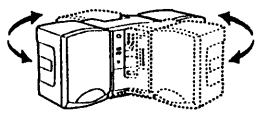
To	Press
Adjust the volume	VOLUME +/–
Turn on/off the radio	POWER

To improve broadcast reception

Reorient the antenna for FM. Reorient the player itself for AM.

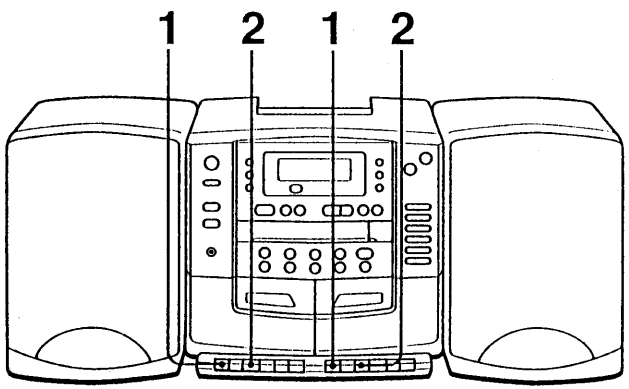


For FM



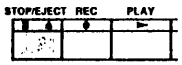
For AM

Playing a tape

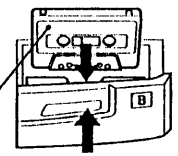


For hookup instructions, see pages 28 - 29.

1

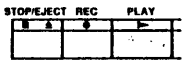


Press ■⏏ to open the tape compartment and insert a recorded tape. Use TYPE I (normal) tape only. Close the compartment.



With the side you want to play facing forward

2



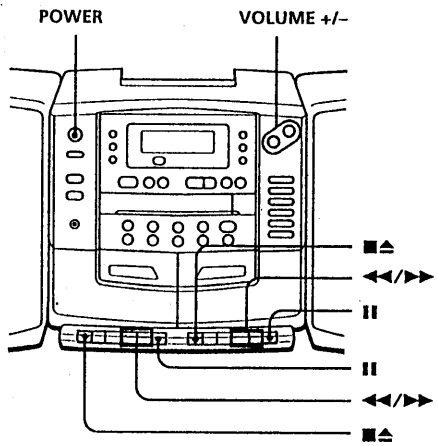
Press ►

The player turns on (direct power-on) and starts playing.

Tip

Next time you want to listen to a tape, just press ►. The player turns on automatically and starts playing the tape.

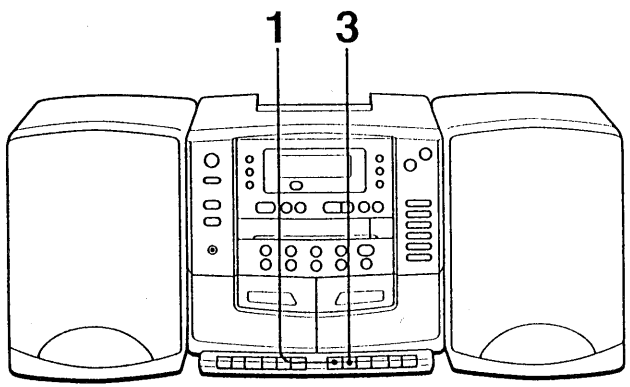
Use these buttons for additional operations



To	Press
Adjust the volume	VOLUME +/–
Stop playback	■⏏
Fast-forward or rewind the tape	►► or ◄◄ *
Pause playback	II Press the button again to resume play after pause.
Eject the cassette	■⏏
Turn on/off the player	POWER

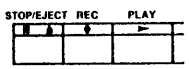
*After winding the tape with ►► or ◄◄, press ■⏏ to release it.

Recording on a tape

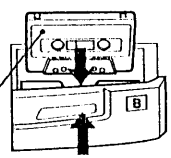


For hookup instructions, see pages 28 - 29.

1



Press ■⏏ to open the tape compartment and insert a blank tape. Use TYPE I (normal) tape only.

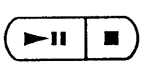


With the side you want to record on facing forward

2

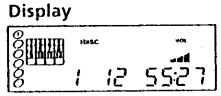
Select the program source you want to record.

CD



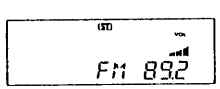
To record from the CD player, insert a CD (see page 4) and press ■ on the CD section.

Display



BAND

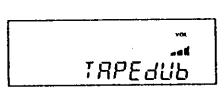
To record from the radio, press BAND and tune in the station you want (see page 6.)



POWER

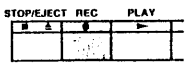
FUNCTION

To record from the tape, insert a recorded tape into deck A (see page 8.)
Then turn on the power and press FUNCTION until "TAPEdub" appears in the display.



3

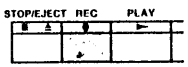
deck B



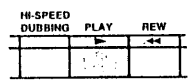
Start recording.

To record from the CD player and the radio, press ● on deck B (► is depressed automatically.)

deck B



deck A

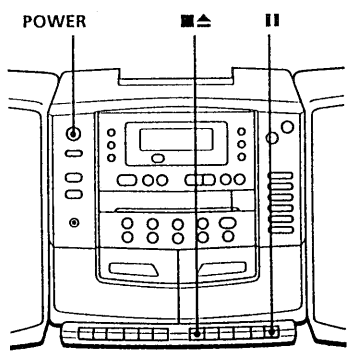


To record from the tape, press ● on deck B (► is depressed automatically), and then press ► on deck A. (for high speed dubbing, press HI-SPEED DUBBING instead.)

Tips

- Adjusting the volume or the audio emphasis (see page 30) will not affect the recording level.
- If the AM program makes a whistling sound after you've pressed ● in step 3, set the ISS (Interference Suppress Switch) at the rear to the position that most decreases the noise. Normally set the switch to "2."
- To record from discs at the average recording level, press A. AGC berore starting recording . Do not press A. AGC during recording.

Use these buttons for additional operations



To	Press
Stop recording	■⏏ on deck B
Pause recording	II on deck B Press the button again to resume recording.
Turn on/off the player	POWER

SECTION 2
MECHANICAL ADJUSTMENTS

PRECAUTION

1. Clean the following parts with a denatured-alcohol-moistened swab:
   record/playback head — pinch roller
   erase head — rubber belts
   capstan — idlers
2. Demagnetize the record/playback head with a head demagnetizer. (Do not bring the head demagnetizer close to the erase head.)
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage unless otherwise noted.
6. Power supply voltage: 12V dc.

Torque Measurement

Torque	Torque meter	Meter reading
Forward	CQ-102C	22−55g•cm (0.31−0.76 oz•inch)
Forward back tension	CQ-102C	2−5g•cm (0.028−0.069 oz•inch)
Fast Forward	CQ-201B	more than 45g•cm (more than 0.62 oz•inch)
Rewind	CQ-201B	more than 45g•cm (more than 0.62 oz•inch)

Tape Tension Measurement

Mode	Tension Meter	Meter Reading
Forward	CQ-403A	more than 100g (more than 1.39 oz)

SECTION 3
ELECTRICAL ADJUSTMENTS

3-1. TAPE RECORDER SECTION [0dB=0.775V]

Standard Input Level

Input terminal	MIX MIC IN
load impedance	300Ω
input signal level	3.461mV (−47dB)

Standard Output Level

Output terminal	SP OUT	HP OUT
load impedance	4Ω	32Ω
output signal level	0.775V (0dB)	0.25V (−10dB)

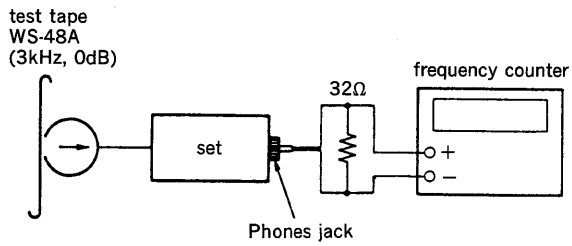
Test Tape

Type	Signal	Used for
WS-48A	3kHz, 0dB	tape speed adjustment

Tape Speed Adjustment [DECK A] [DECK B]

Procedure:

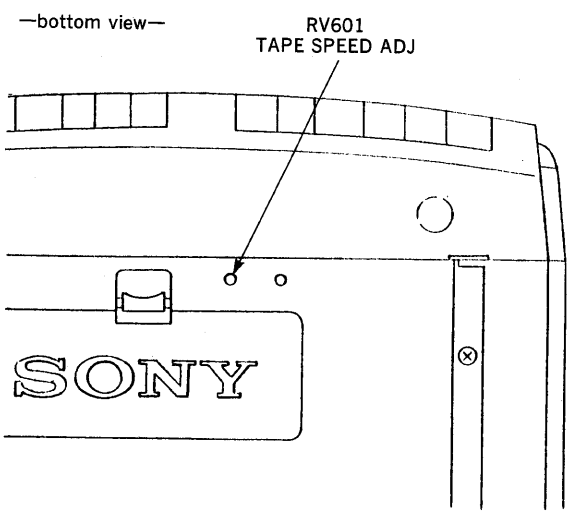
Mode: playback



Speed	S601 (HI-SPEED)	Deck	Adjustment point	Frequency counter
Normal	OFF	A	RV601	2,970 to 3,030Hz
		B	confirm	

Frequency difference between the begining and the end of the tape should be within ±1%.

Adjustment Location:

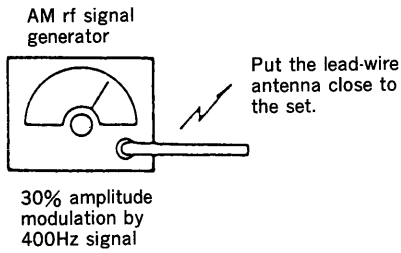


3-2. TUNER SECTION 0dB=1μV

• AM Section

Setting :

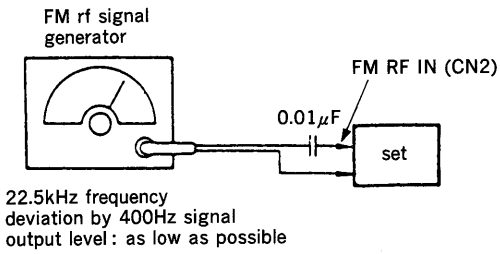
BAND button : AM

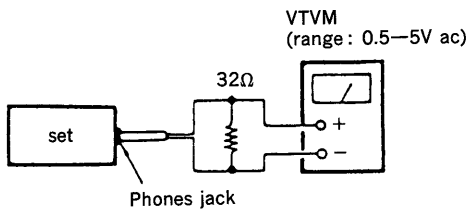


• FM Section

Setting :

BAND button : FM





- Repeat the procedures in tracking adjustment several times, and the tracking adjustment should be finally done by the trimmer capacitors.
- Remove telescopic antenna in FM section adjustments.

AM FREQUENCY COVERAGE ADJUSTMENT		
Adjust for the following value reading on digital voltmeter.		
Frequency Display	530kHz	1,710kHz
Reading on Digital voltmeter	0.9±0.2V	5.6±0.2V
Adjustment Part	(confirmation)	L4

AM TRACKING ADJUSTMENT	
Adjust for a maximum reading on VTVM.	
L4	CT2
620kHz	1,400kHz

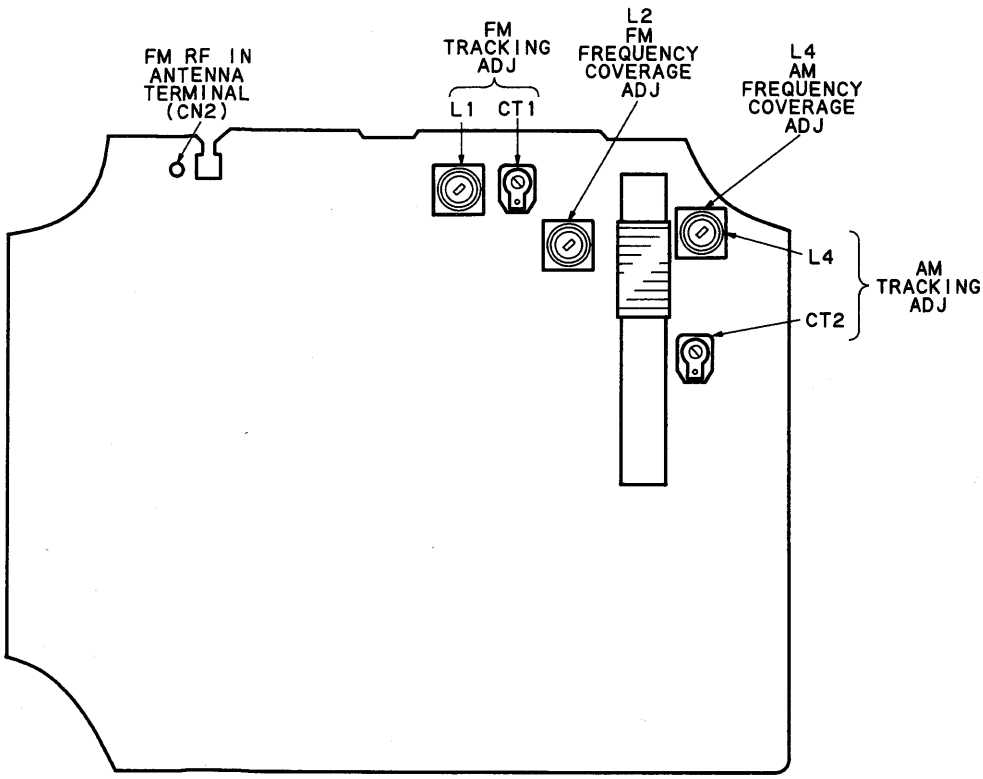
FM FREQUENCY COVERAGE ADJUSTMENT		
Adjust for the following value reading on digital voltmeter.		
Frequency Display	87.5MHz	108.0MHz
Reading on Digital voltmeter	1.7±0.2V	4.0±0.2V
Adjustment Part	(confirmation)	L2

FM TRACKING ADJUSTMENT	
Adjust for a maximum reading on VTVM.	
L1	CT1
87.5MHz	108.0MHz

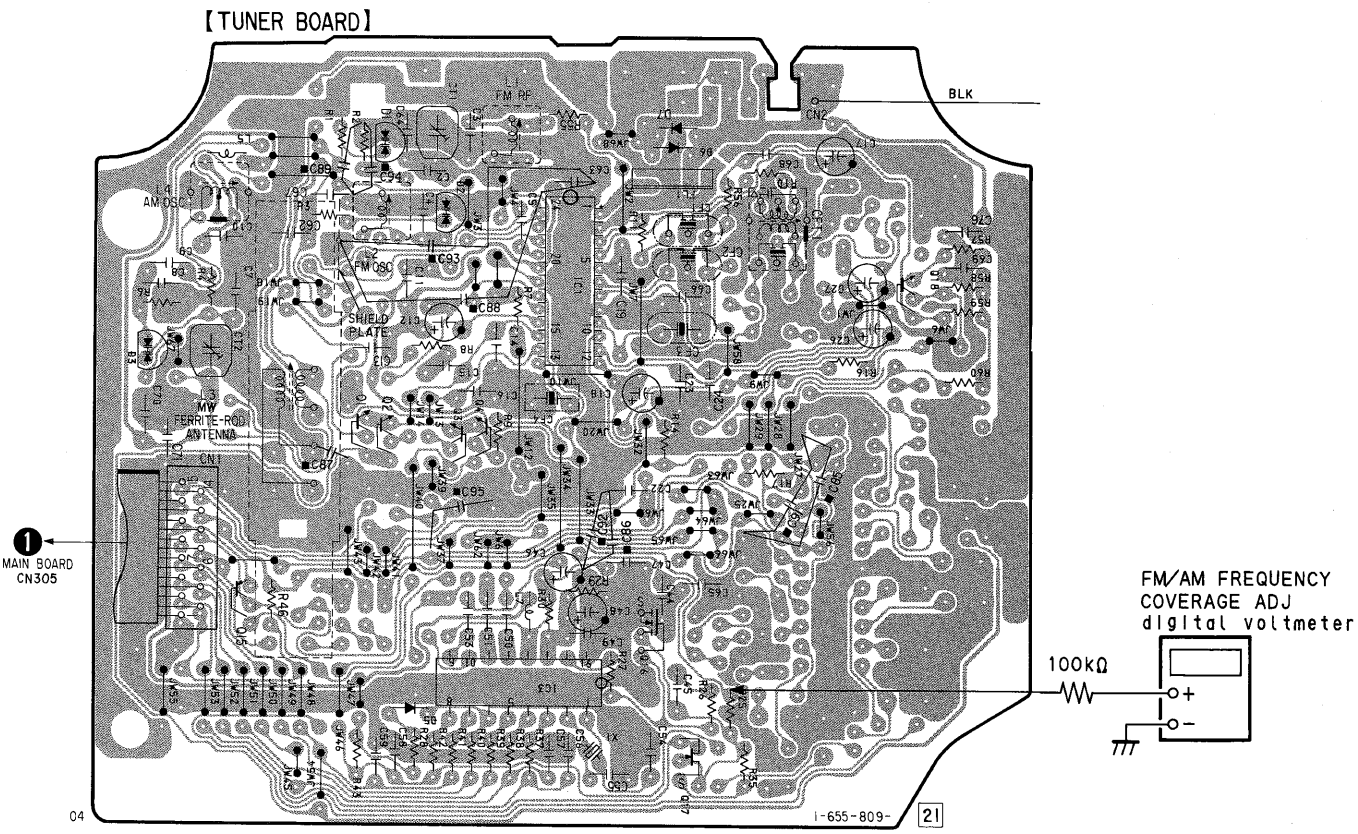
Adjustment Location : See page 10.

Adjustment Location : tuner board

—tuner board (component side)—



—tuner board (conductor side)—



3-3. CD SECTION

Notes on Adjustment

1. Perform Traverse adjustment in test mode.
   After adjustment, be sure to release test mode.
2. Perform adjustments in the order given.
3. Use the disc (YEDS-18, Part No. 3-702-101-01) only when so indicated.
4. Short the both sides of R720 on the CD CHANGER board for stop operation of anti-shock circuit. (See page 14.)

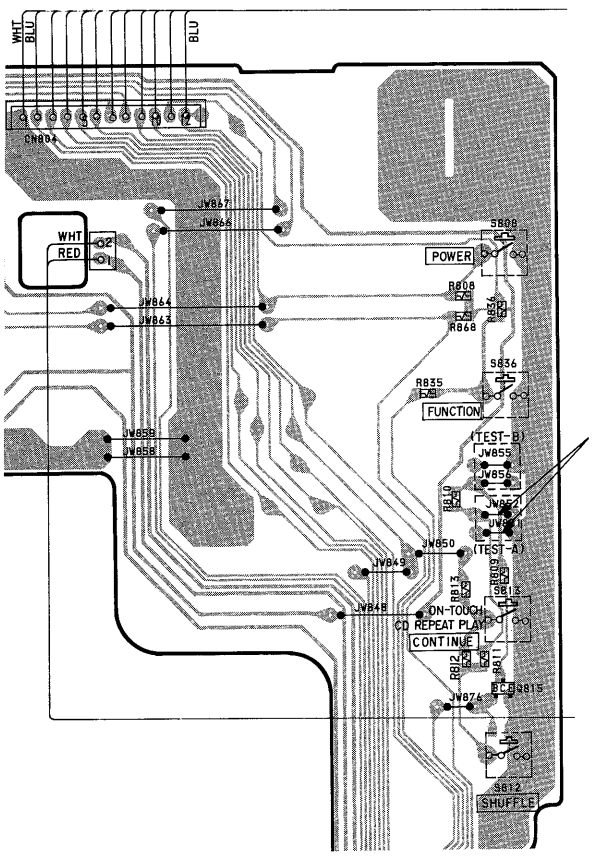
• In case of Test Mode

1. Short the jumper wire between the JW851 and JW852 on the CONTROL board.
2. Insert the AC power plug.
3. Release the shorted jumper wire.
4. Then the display indicates repeat five patterns, the test mode is set.

• Release the Test Mode

Push CANCEL button, the test mode is release.

—control board (conductor side)—



Short the jumper wire. (JW851 and JW852.)

Before Adjustment

Put the set into test mode and perform the following checks. Repair if there are any problems.

• Sled Motor Check

Press the ▶▶|, |◀◀ buttons and confirm that the optical pick-up moves smoothly from the innermost to outermost circumference and back smoothly and with no catching or abnormal noises.

▶▶| : optical pick-up moves to the outer circumference
|◀◀ : optical pick-up moves to the inner circumference

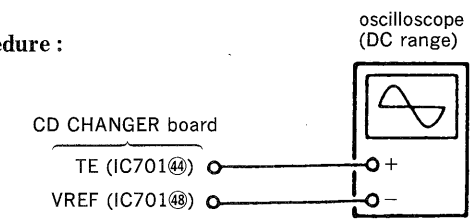
• Focus Search Check

1. Push the ▶❚❚ button. (Focus search operation is performed continuously.)
2. Look at the optical pick-up objective lens and confirm the it moves up and down smoothly, with no catching or abnormal noises.
3. Push the ■ button.
   Confirm that focus search operation stops. If it does not, push the ■ button again longer.

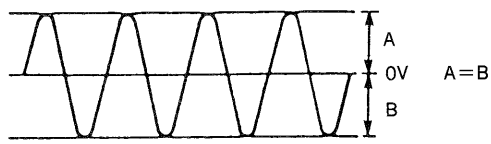
Traverse Adjustment

This adjustment is to be done when the optical pick-up block is replaced.

Procedure :



1. Connect the oscilloscope between TE and VREF.
2. Put the set into test mode.
3. Push the OPEN/CLOSE ▲ button to open the tray and insert disc (YEDS-18).
4. Push the OPEN/CLOSE ▲ button once more to close the tray.
5. Press the ▶▶| and |◀◀ buttons to move the optical pick-up to the center.
6. Push the ▶❚❚ button. (Display indication : Cd 01)
7. Push the ■ button. (Display indication : Repeat five patterns)
8. Push the ▶❚❚ button. (Display indication : Cd 01)
9. Adjust RV703 so that the oscilloscope traverse waveform is symmetrical, as shown in the figure below.
10. Release test mode after adjustment is completed.

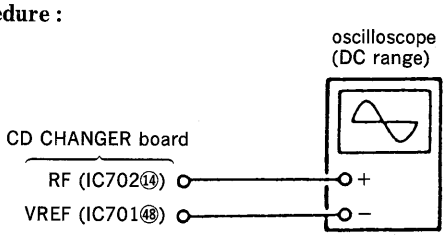


Adjustment Location : See page 14.

Focus Bias Adjustment

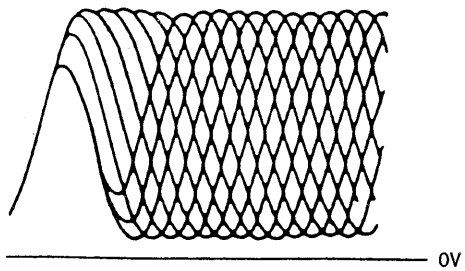
This adjustment is to be done when the optical pick-up block is replaced.

Procedure :



1. Connect the oscilloscope between RF and VREF.
2. Insert disc (YEDS-18) and push the ▶❚❚ button.
3. Adjust RV701 so that the oscilloscope waveform is maximum as shown in the figure below (eye pattern).

• RF signal reference waveform (eye pattern)



When observing the eye pattern, set the oscilloscope for AC range and raise vertical sensitivity.

Adjustment Location : See page 14.

REFERENCE

Focus/Tracking Gain Adjustment

A frequency response analyzer is necessary in order to perform this adjustment exactly.

However, this gain has a margin, so even if it is slightly off, there is no problem. Therefore, do not perform this adjustment.

Focus/tracking gain determines the pick-up follow-up (vertical and horizontal) relative to mechanical noise and mechanical shock when the 2-axis device operate.

However, as these reciprocate, the adjustment is at the point where both are satisfied.

- When gain is raised, the noise when the 2-axis device operates increases.
- When gain is lowered, it is more susceptible to mechanical shock and skipping occurs more easily.

When gain adjustment is off, the symptoms below appear.

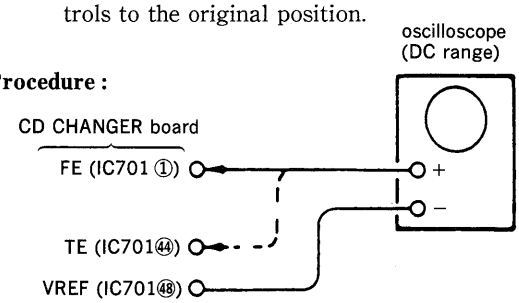
Symptoms \ Gain	Focus	Tracking
• The time until music starts becomes longer for ■ →▶❚❚ on automatic selection. (⏮ , ⏭ buttons pressed.) (Normally takes about 2 seconds.)	low	low or high
• Music docs not start and disc continues to rotate for ■ →▶❚❚ or automatic selection. (⏮, ⏭ buttons pressed.)	—	low
• Sound is interrupted during PLAY. Or time counter display stops progressing.	—	low
• More poise during 2-axis device operation.	high	high

The following is a simple adjustment method.

—Simple Adjustment—

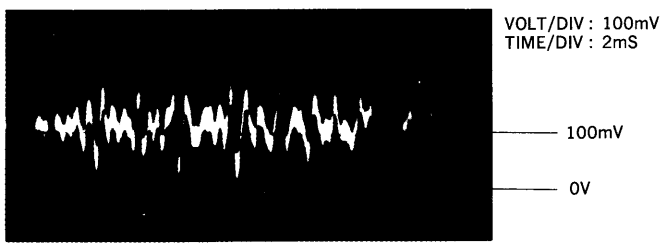
Note : Since exact adjustmeunt cannot be performed, remember the positions of the controls before performing the adjustment. If the positions after the simple adjustment are only a little different, return the controls to the original position.

Procedure :



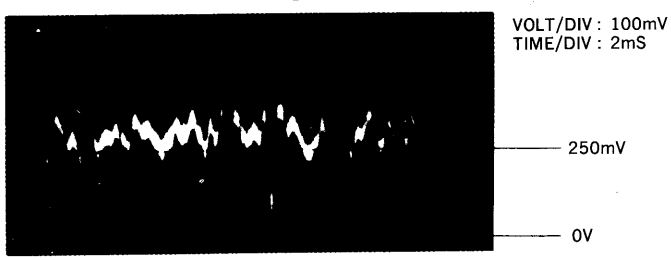
1. Keep the set horizontal.
   If the set not horizontal, this adjustment cannot be performed due to the gravity against the 2 axis device.
2. Insert disc (YEDS-18) and push the ▶❚❚ button.
3. Connect the oscilloscope between FE and VREF.
4. Adjustment RV702 so that the waveform is as shown in the figure below. (focus gain adjustment)

● Correct Example

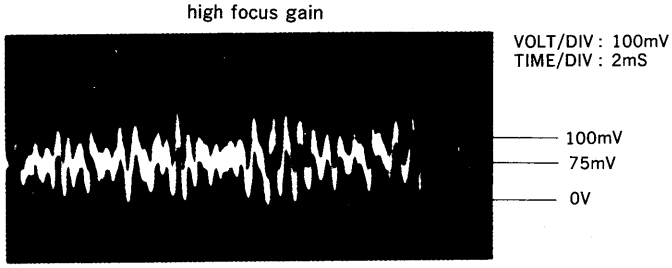


● Incorrect Examples (DC level changes more than on adjusted waveform)

low focus gain



high focus gain

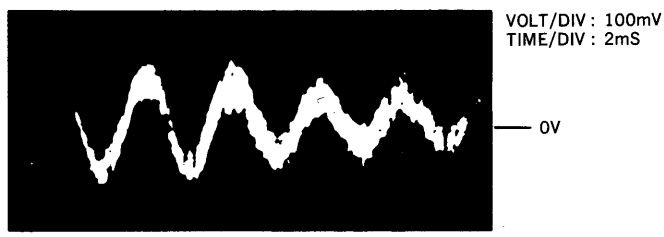


5. Connect the oscilloscope between TE and VREF.
6. Adjust RV704 so that the waveform is as shown in the figure below. (tracking gain adjustment)

● Correct Example

● Incorrect Examples (fundamental wave appears)

low tracking gain

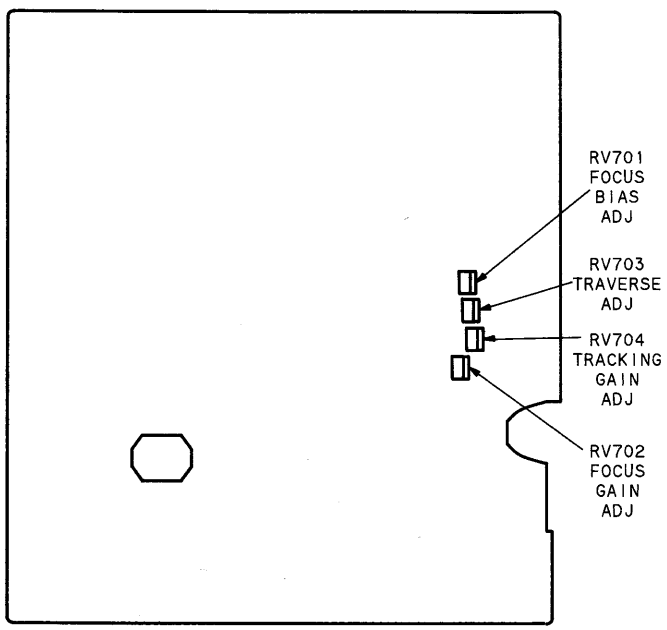


high tracking gain
(higher fundamental wave than for low gain)

Adjustment Location : See page 14.

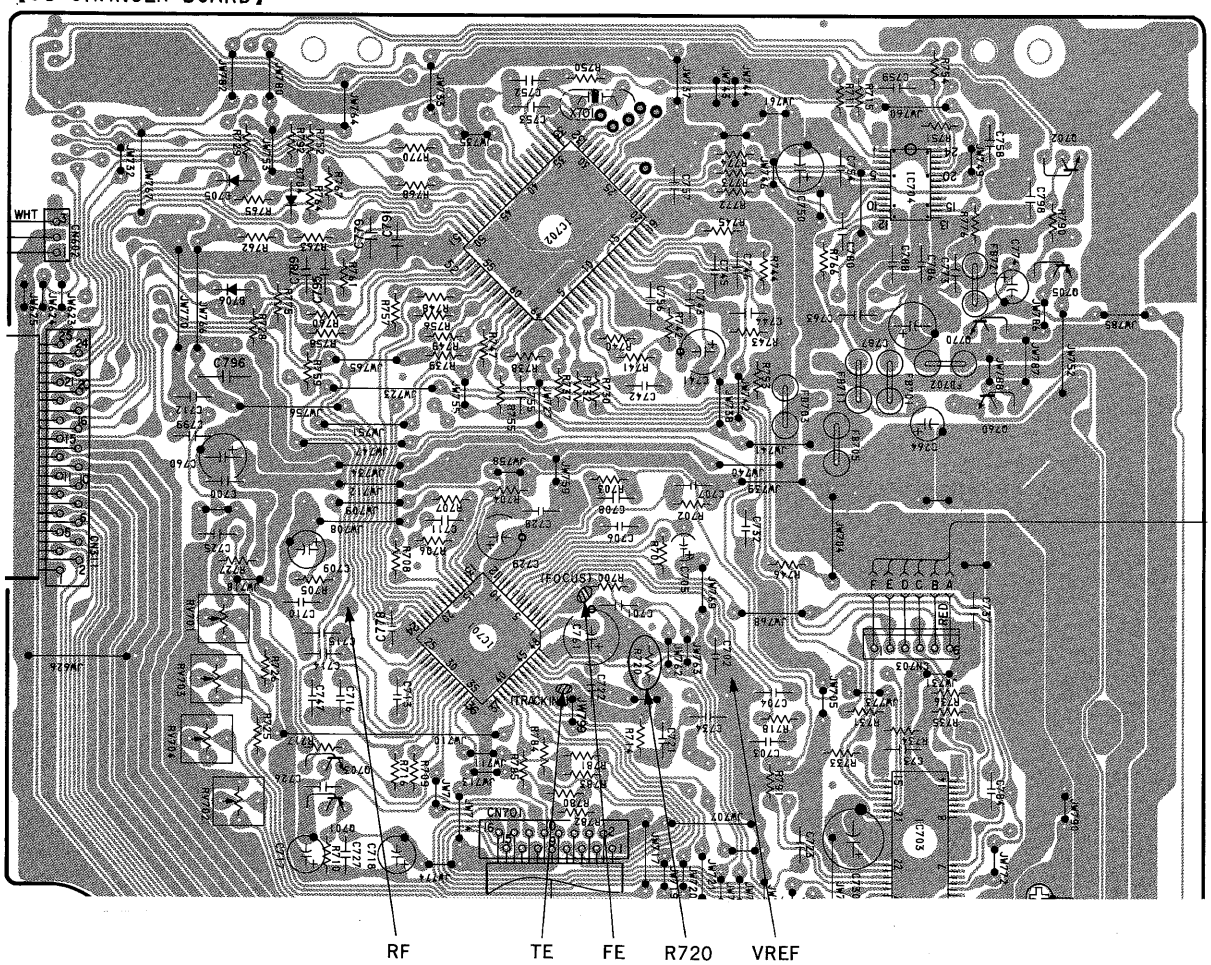
Adjustment Location : CD changer board

—CD changer board (component side)—



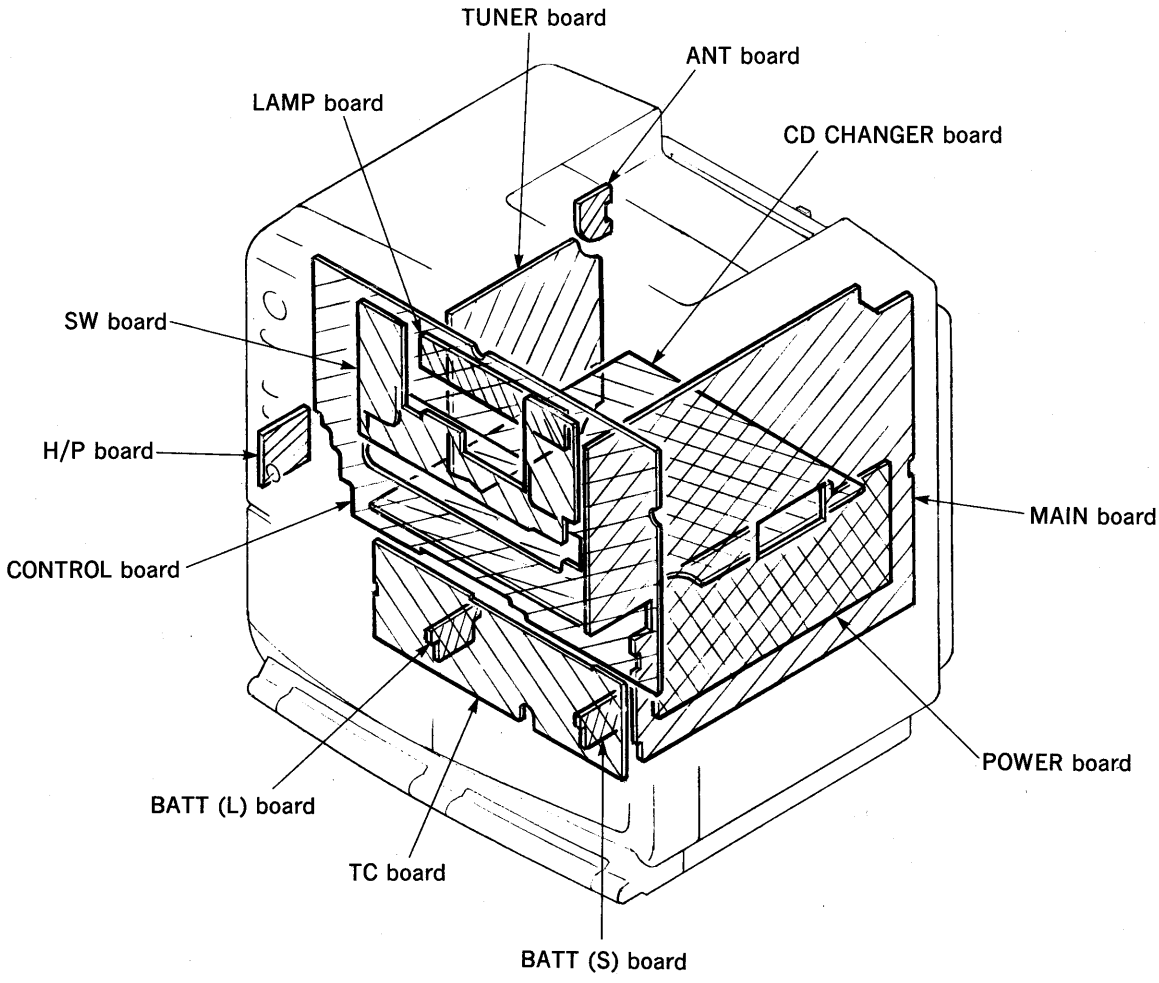
—CD changer board (conductor side)—

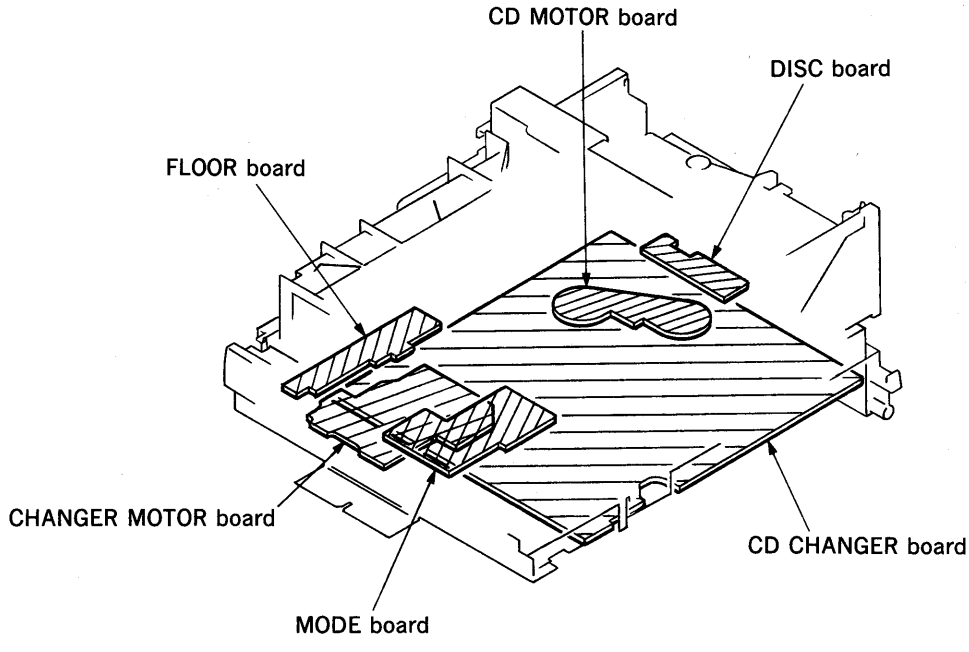
【CD CHANGER BOARD】



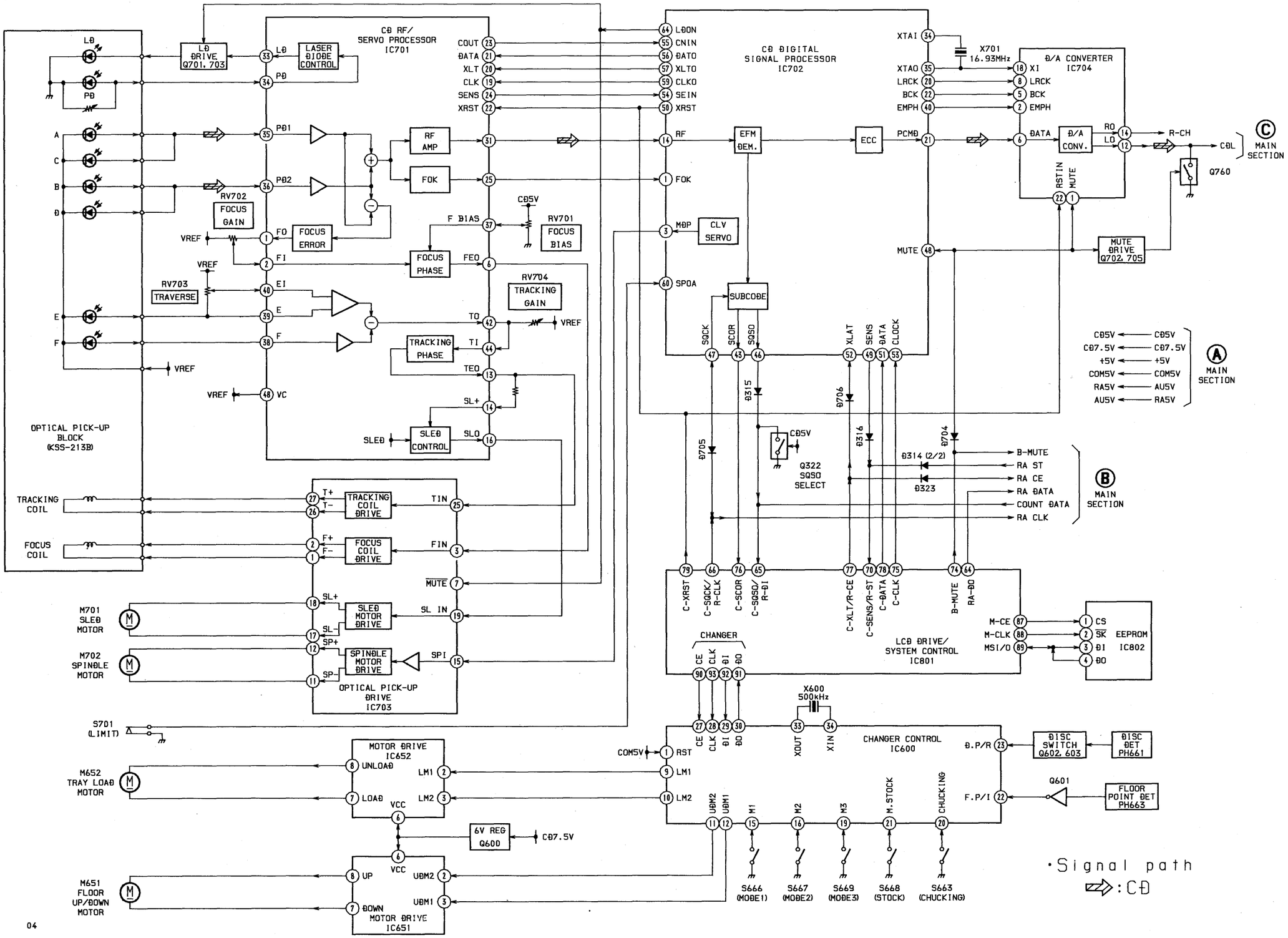
SECTION 4
DIAGRAMS

4-1. CIRCUIT BOARDS LOCATION

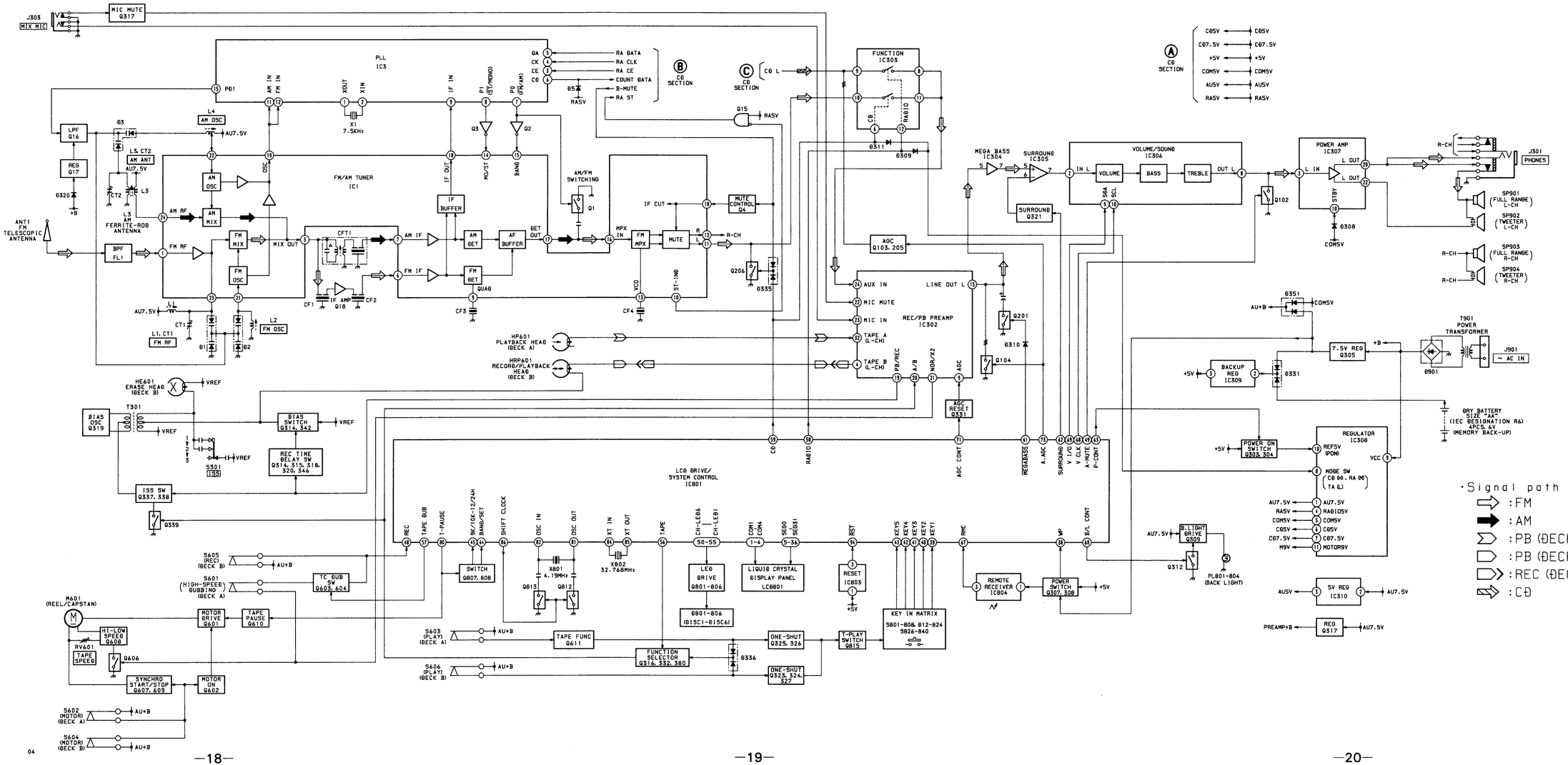




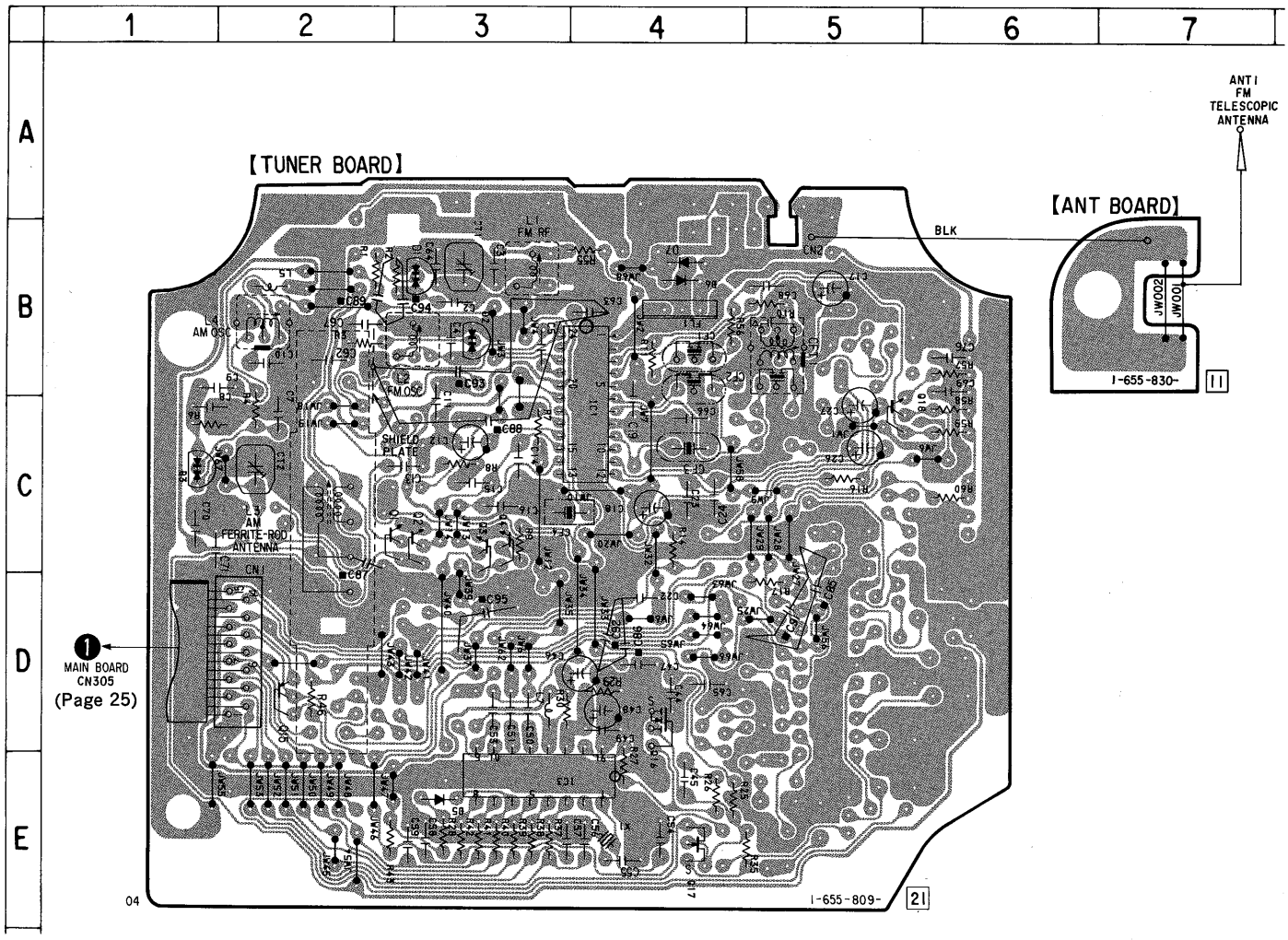
4-2. BLOCK DIAGRAM—CD SECTION—



4-3. BLOCK DIAGRAM—MAIN SECTION—



4-4. PRINTED WIRING BOARDS—TUNER SECTION—



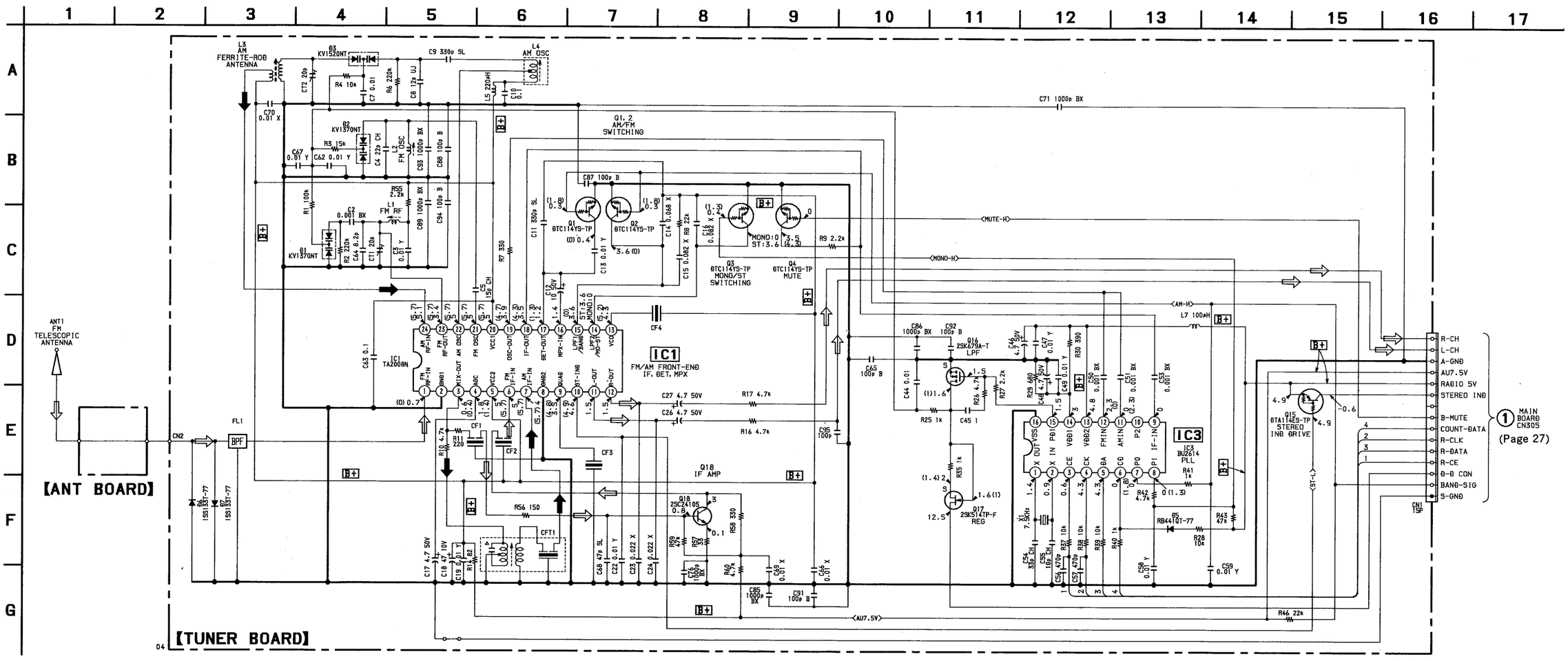
• Semiconductor Location

Ref. No.	Location
D1	B-3
D2	B-3
D3	C-1
D5	E-3
D6	B-4
D7	B-4
IC1	B-4
IC3	E-3
Q1	C-3
Q2	C-3
Q3	C-3
Q4	C-3
Q15	D-2
Q16	D-4
Q17	E-4
Q18	C-5

Note :

- ○— : parts extracted from the component side.
- ■ : parts mounted on the conductor side.
- ⬚← indicates side identified with part number.
- ▨ : Pattern on the side which is seen.

4-5. SCHEMATIC DIAGRAM—TUNER SECTION— • Refer to page 45 for IC Block Diagrams.



Note :

- All capacitors are in μF unless otherwise noted. pF : $\mu\mu$F 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- B+ : B+ Line
- Voltage is dc with respect to ground under no-signal (detuned) conditions.
- no mark: FM
  ( ): AM
- Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path.
  ⇨ : FM
  ➡ : AM

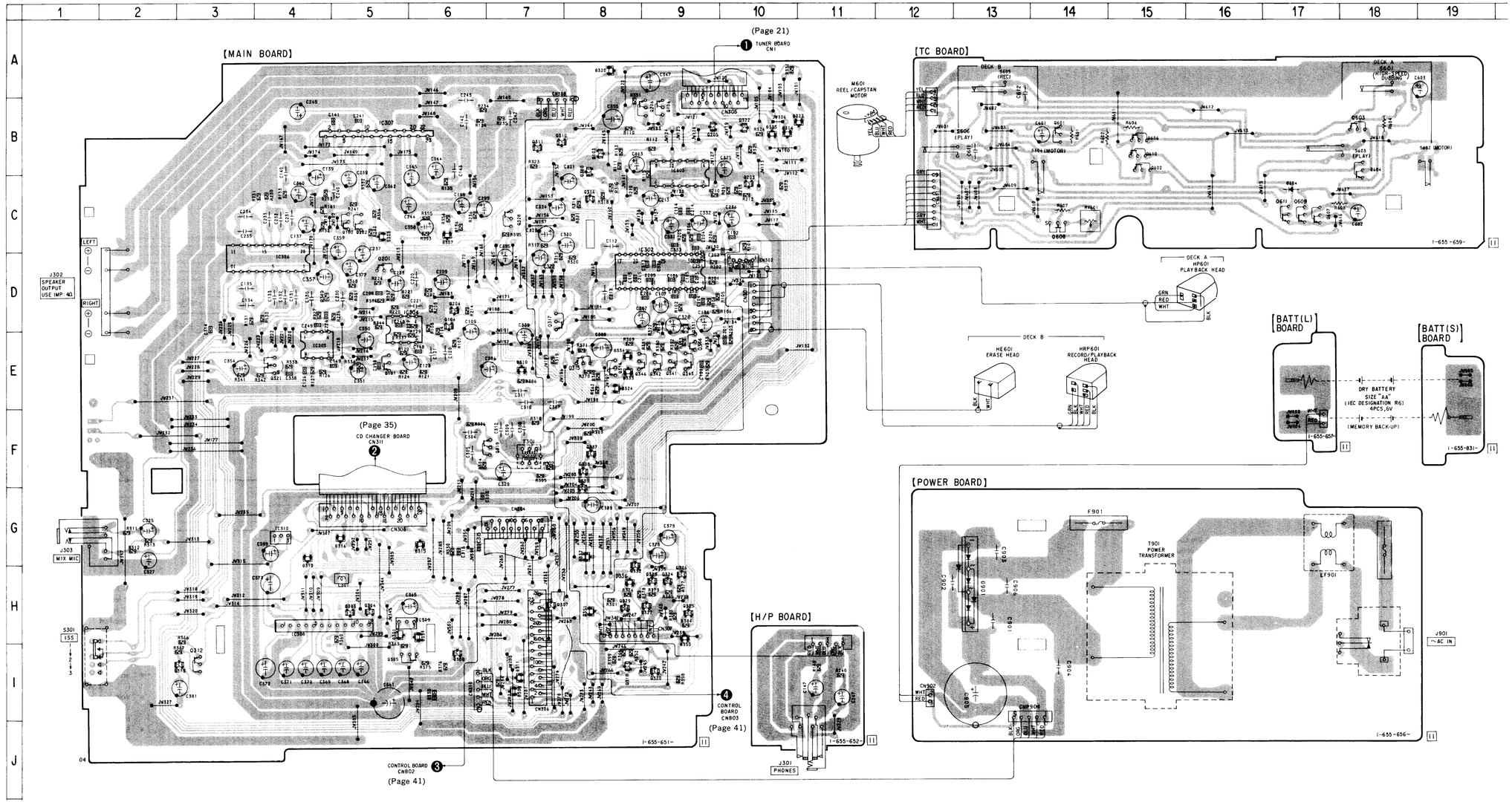
4-6. PRINTED WIRING BOARDS—MAIN SECTION—

● **Semiconductor Location**

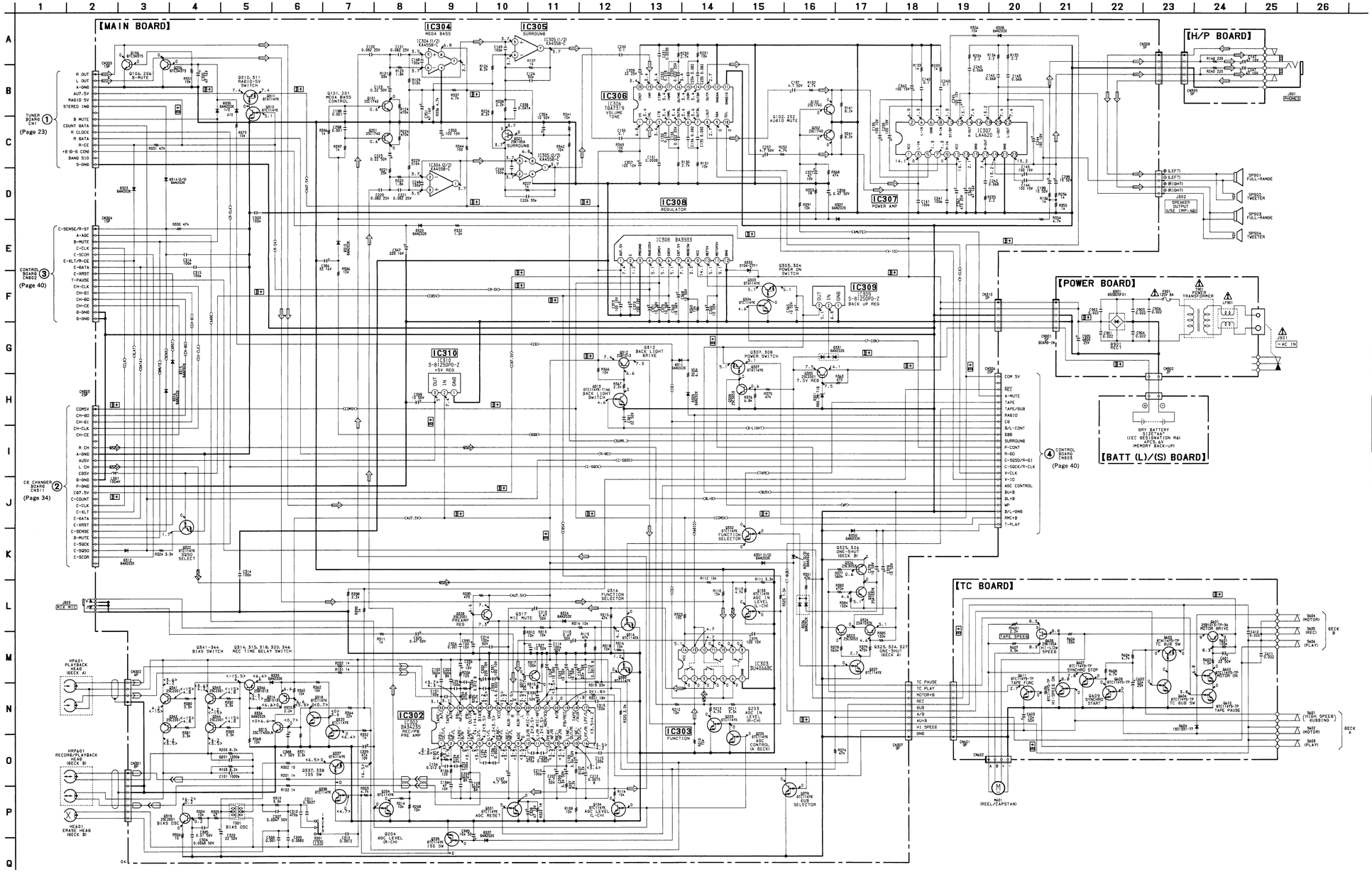
Ref. No.	Location	Ref. No.	Location
D301	H-5	Q303	H-5
D307	C-6	Q304	H-5
D308	C-5	Q305	I-5
D309	I-7	Q307	H-7
D310	E-7	Q308	I-6
D311	I-7	Q310	B-7
D312	G-4	Q311	B-7
D314	B-10	Q312	I-3
D315	G-6	Q313	I-3
D316	G-5	Q314	E-8
D320	A-8	Q315	E-8
D323	B-10	Q316	C-8
D324	E-8	Q317	D-7
D330	I-6	Q318	I-8
D331	H-6	Q319	F-7
D333	E-8	Q320	I-9
D334	E-8	Q321	E-4
D335	B-10	Q322	B-10
D336	H-8	Q323	H-9
D337	G-8	Q324	H-9
D350	H-9	Q325	H-9
D351	H-8	Q326	H-9
D604	C-17	Q327	H-9
D901	H-13	Q328	C-7
		Q331	D-9
IC302	D-8	Q332	G-8
IC303	B-9	Q337	F-8
IC304	D-6	Q338	F-8
IC305	E-4	Q339	F-8
IC306	D-4	Q341	E-9
IC307	B-5	Q342	E-9
IC308	H-4	Q343	E-9
IC309	H-6	Q344	E-9
IC310	G-4	Q346	E-9
		Q379	H-8
Q101	E-5	Q380	B-8
Q102	C-5	Q601	B-14
Q103	B-8	Q602	B-15
Q104	D-6	Q603	B-18
Q106	B-9	Q604	B-18
Q201	D-5	Q606	B-15
Q202	C-5	Q607	C-17
Q203	C-10	Q608	C-14
Q204	D-6	Q609	C-17
Q205	B-9	Q610	B-15
Q206	B-9	Q611	C-17

Note :

- ○— : parts extracted from the component side.
- ▨ : Pattern on the side which is seen.



4-7. SCHEMATIC DIAGRAM—MAIN SECTION— • Refer to page 45 for IC Block Diagrams.



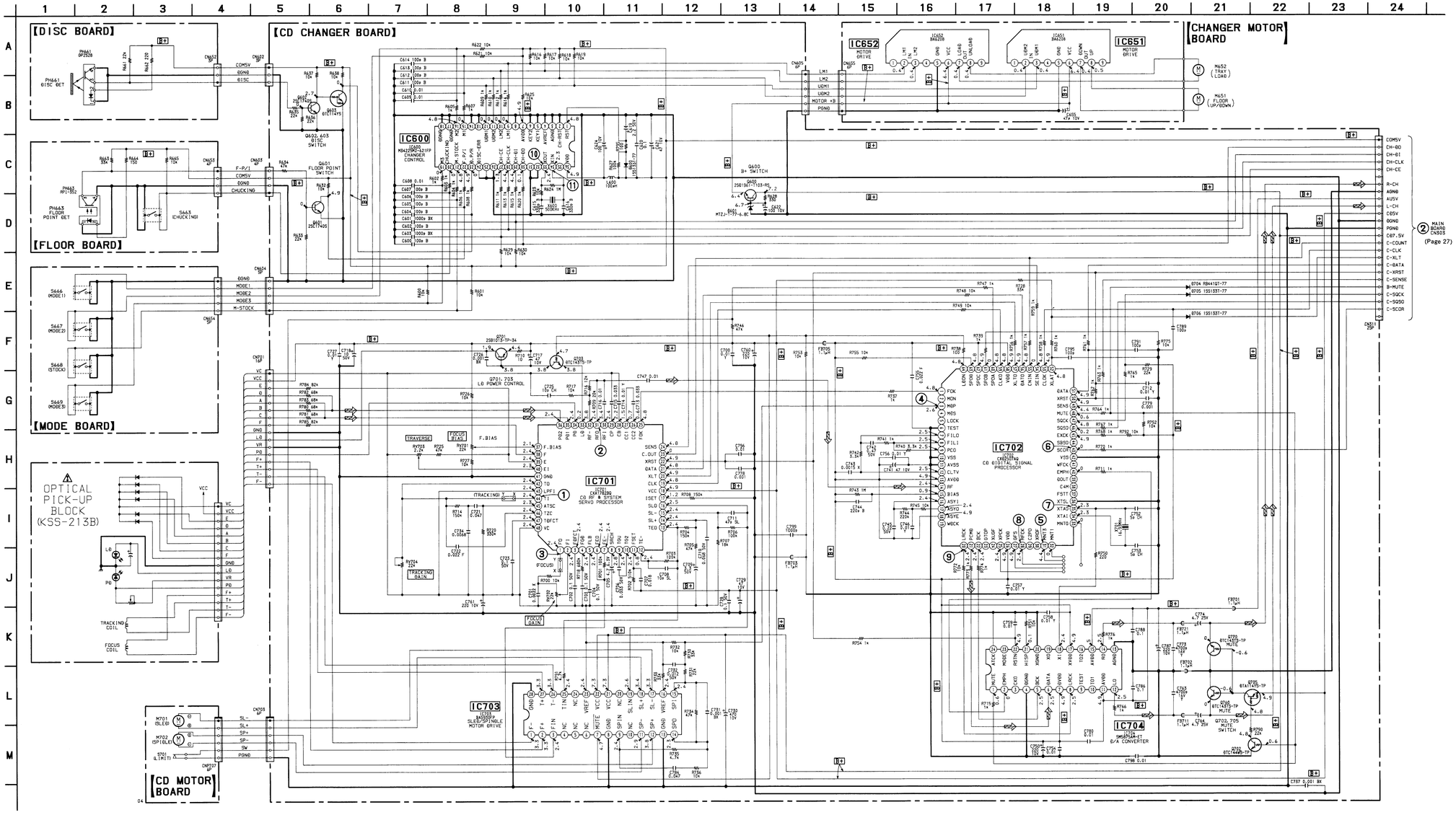
Note :

- All capacitors are in μF unless otherwise noted. pF : μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.

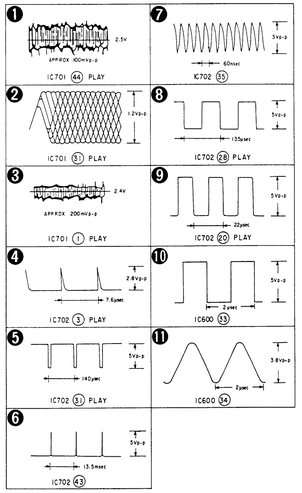
Note :	**Note :**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- B+ : B+ Line
- Voltage is dc with respect to ground under no-signal (detuned) conditions.
- no mark: FM
  ( ): AM
  < >: PB
- Signal path.
  ⇨ : FM
  ⇨ : PB (DECK A)
  ⇨ : PB (DECK B)
  ⇨ : REC (DECK B)
  ⇨ : CD

4-8. SCHEMATIC DIAGRAM—CD SECTION— • Refer to page 45 for IC Block Diagrams.



• Waveforms

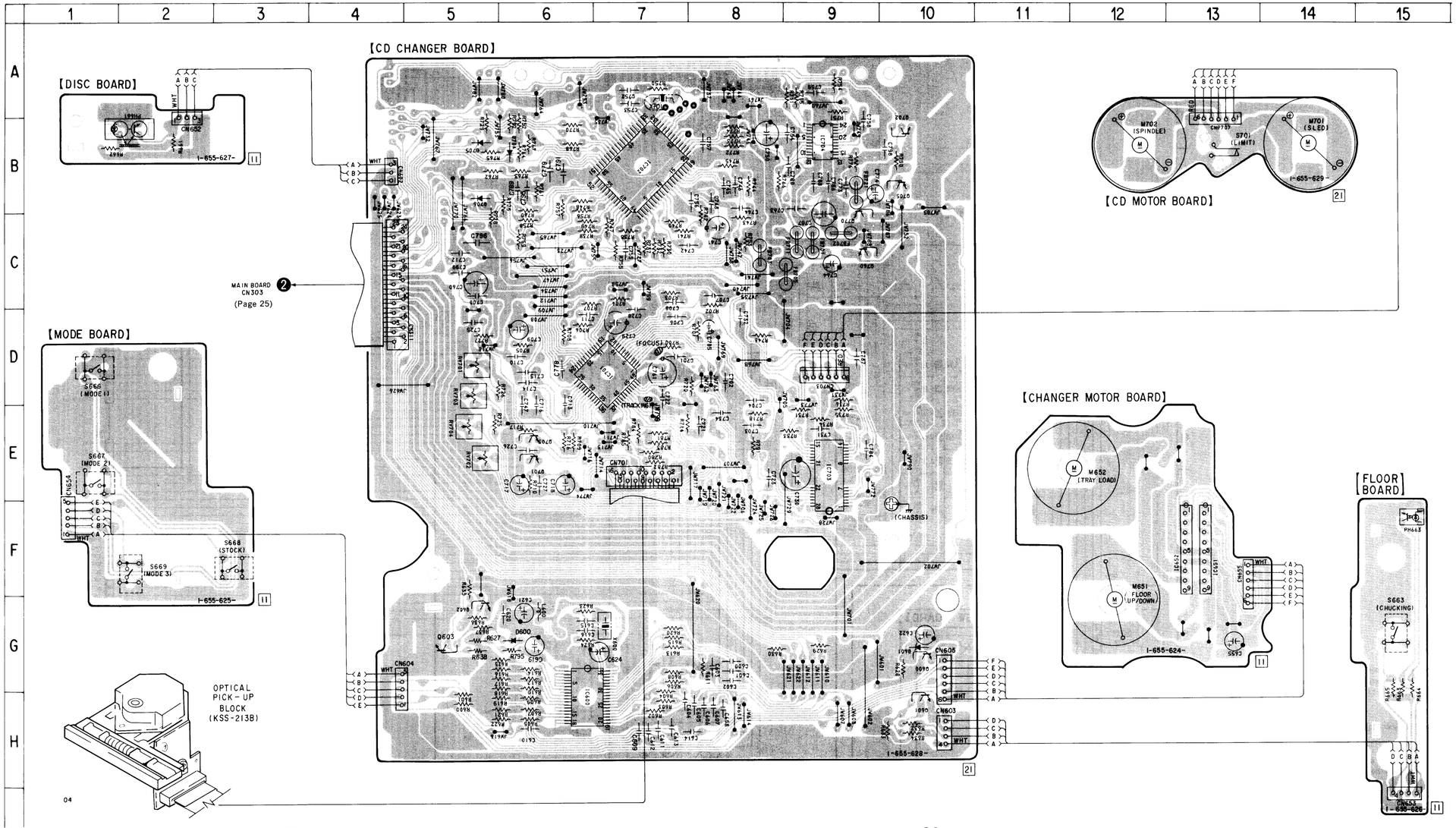


Note :
- All capacitors are in μF unless otherwise noted. pF : μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.

Note :	Note :
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- B+ : B+ Line
- ▭ : adjustment for repair.
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
- no mark: CD PLAY
- Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path. ⇨ : CD

4-9. PRINTED WIRING BOARDS—CD SECTION—

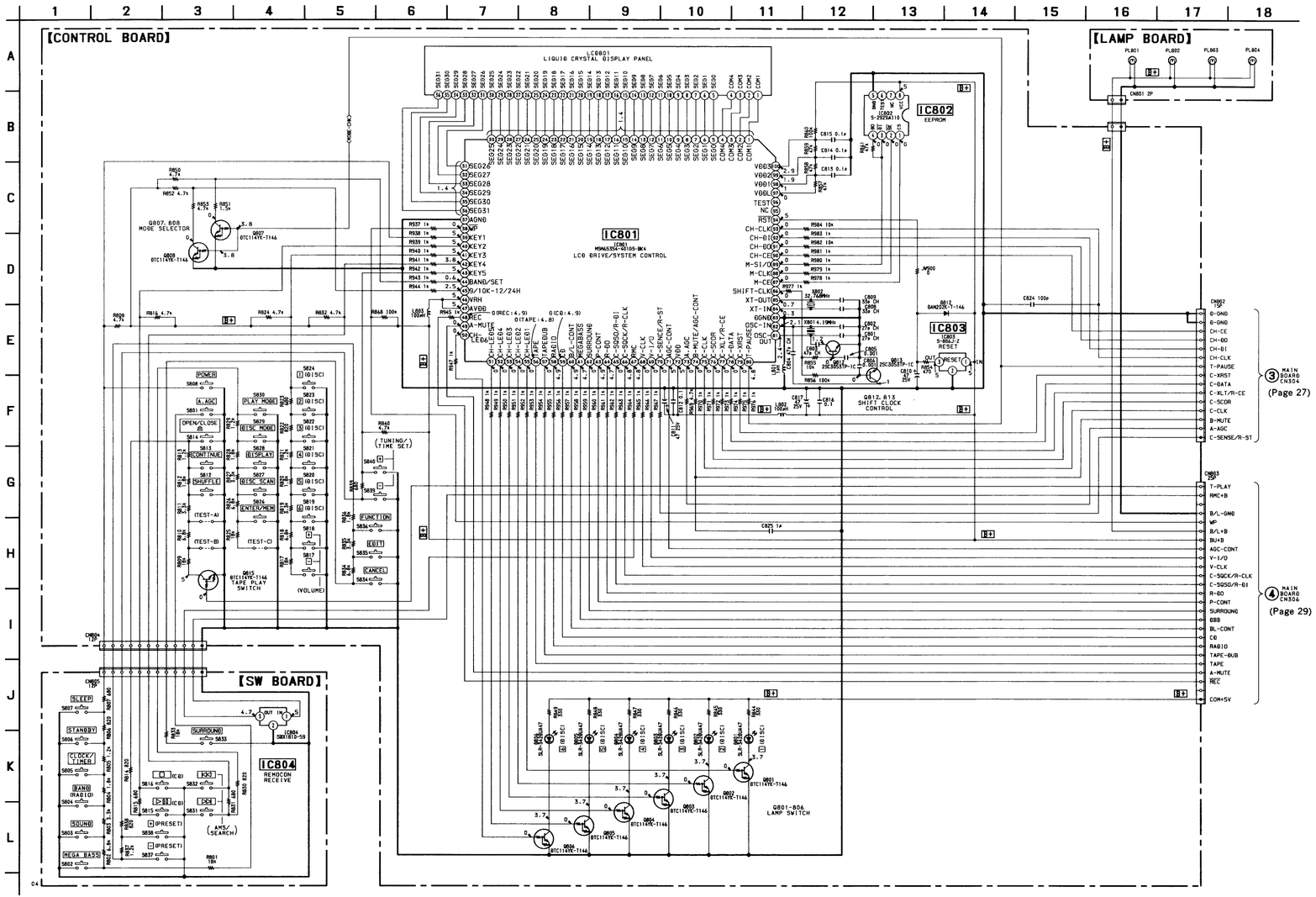


● Semiconductor Location

Ref. No.	Location
D600	G-6
D601	G-10
D704	B-6
D705	B-5
D706	B-5
IC600	H-6
IC651	F-13
IC652	F-13
IC701	D-7
IC702	B-7
IC703	E-9
IC704	B-9
PH661	B-2
PH663	F-15
Q600	G-10
Q601	H-10
Q602	G-5
Q603	G-5
Q701	E-6
Q702	B-10
Q703	E-6
Q705	B-10
Q760	C-9
Q770	C-9

Note :
- ○— : parts extracted from the component side.
- ▨ : Pattern on the side which is seen.

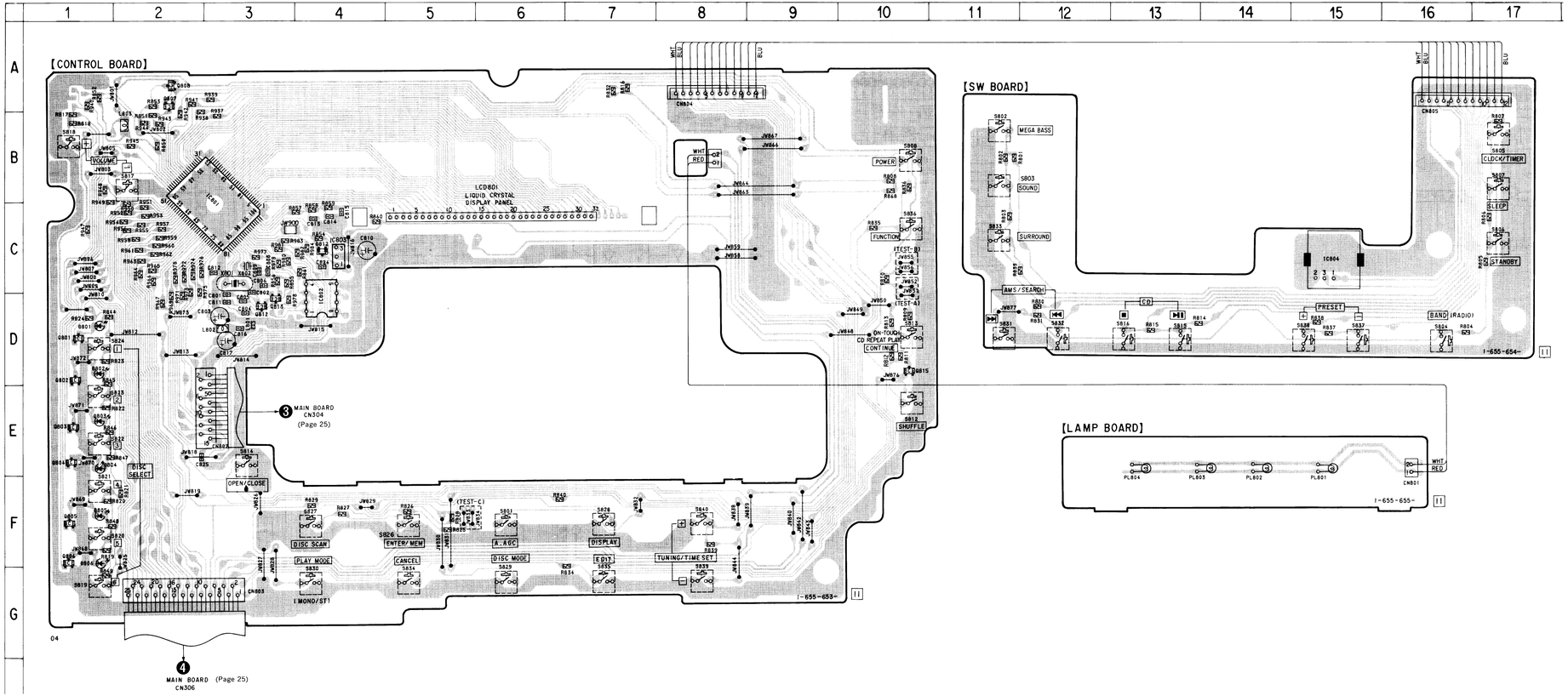
4-10. SCHEMATIC DIAGRAM—CONTROL SECTION— • Refer to page 45 for IC Block Diagrams.



Note :

- All capacitors are in μF unless otherwise noted. pF : μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- B+ : B+ Line
- Voltage is dc with respect to ground under no-signal (detuned) conditions.
- no mark: FM
- Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.

4-11. PRINTED WIRING BOARDS—CONTROL SECTION—



• Semiconductor Location

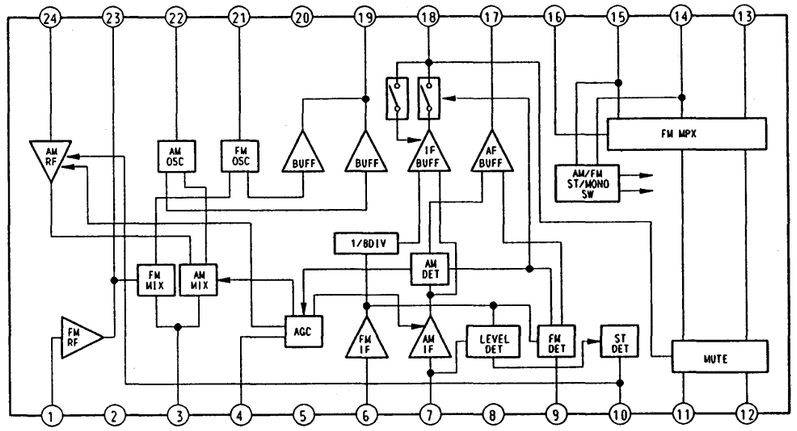
Ref. No.	Location
D801	D-1
D802	D-1
D803	E-1
D804	E-1
D805	F-1
D806	F-1
D812	C-4
IC801	B-3
IC802	D-4
IC803	C-4
Q801	D-1
Q802	D-1
Q803	E-1
Q804	E-1
Q805	F-1
Q806	F-1
Q807	A-2
Q808	A-2
Q812	D-3
Q813	D-3
Q815	D-10

Note :

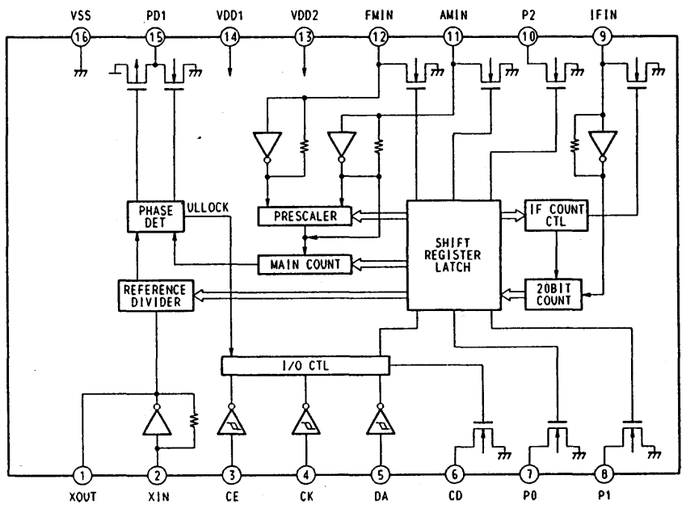
- ○— : parts extracted from the component side.
- ▨ : Pattern on the side which is seen.

• IC Block Diagrams

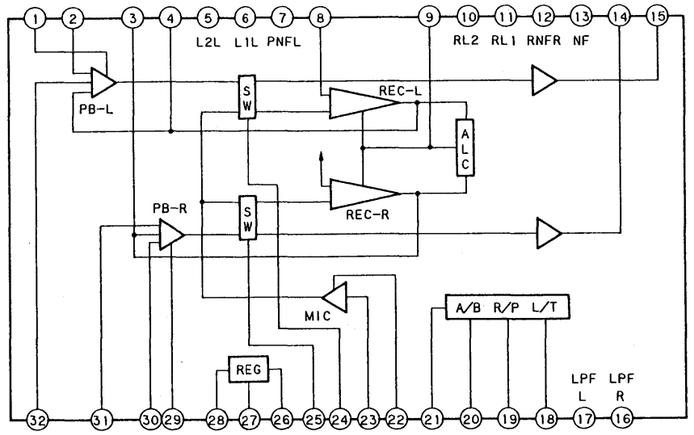
IC1 TA2008N



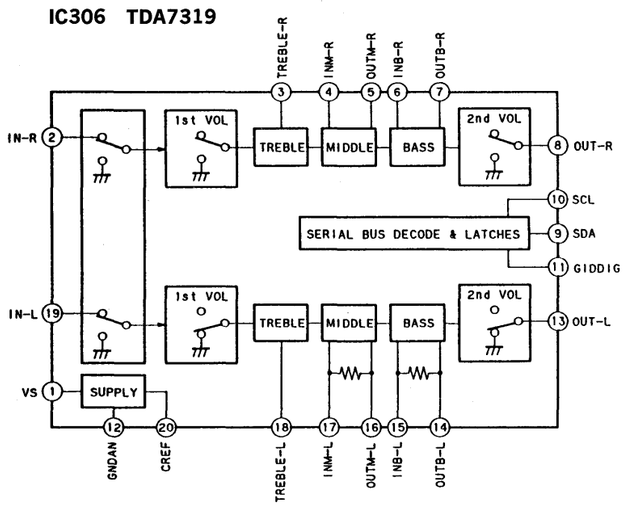
IC3 BU2614



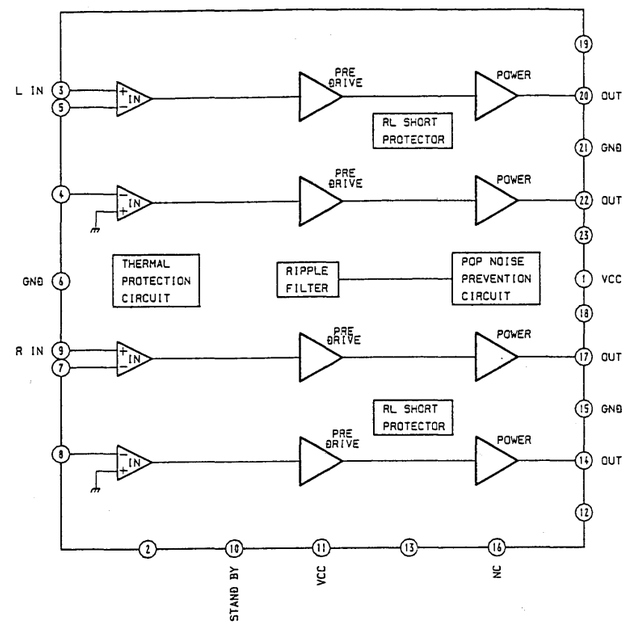
IC302 BA3423S



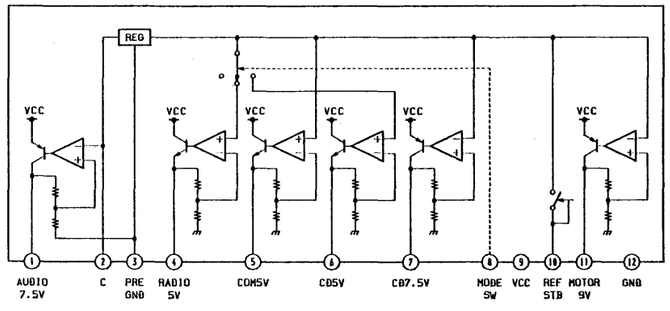
IC306 TDA7319



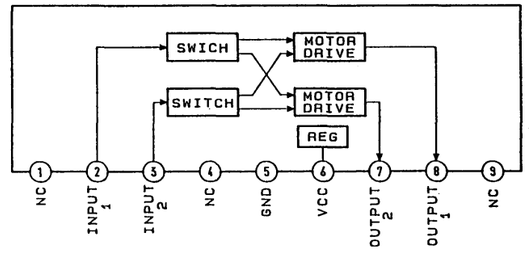
IC307 LA4620



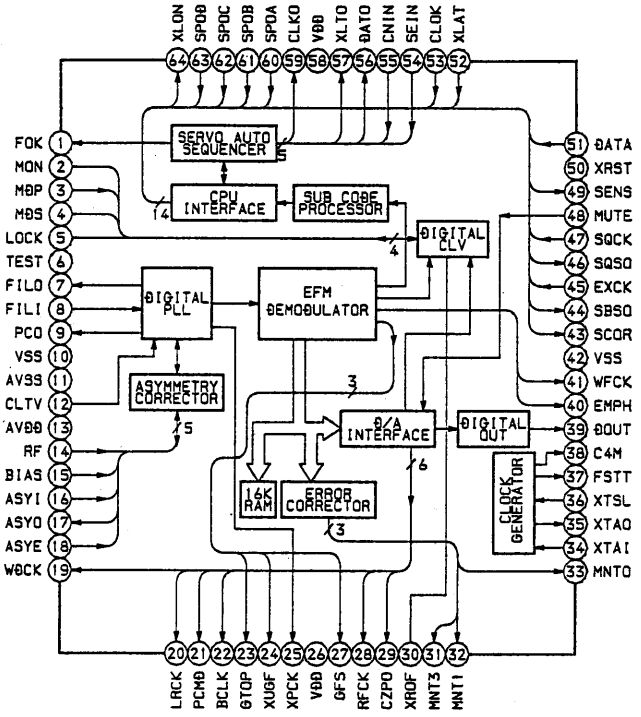
IC308 BA3933



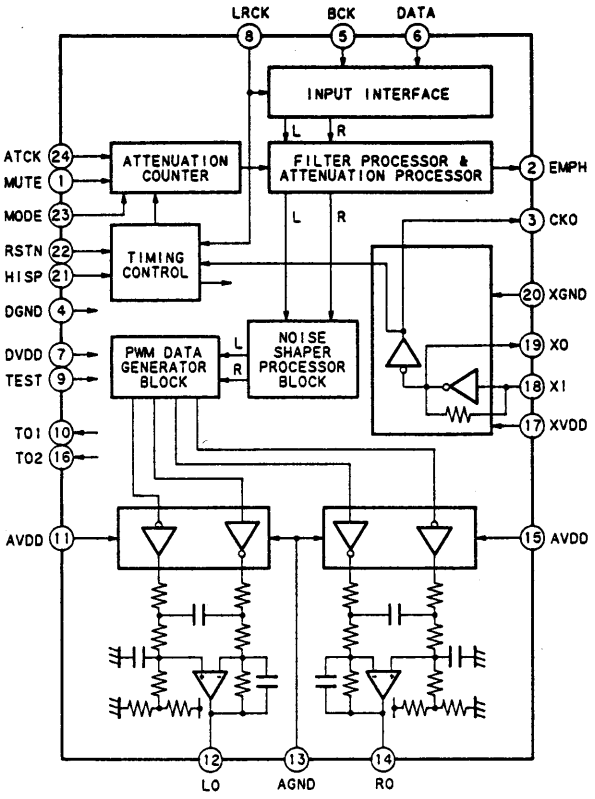
IC651, 652 BA6208



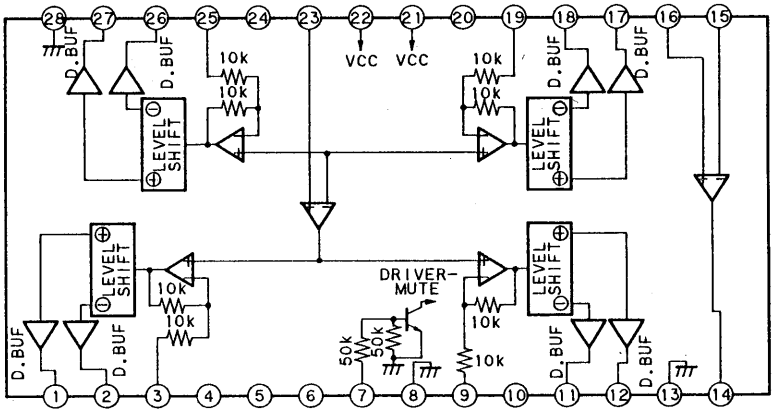
IC702 CXD2507AQ



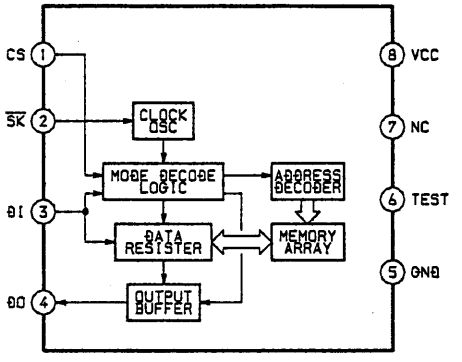
IC704 SM5875AM-ET



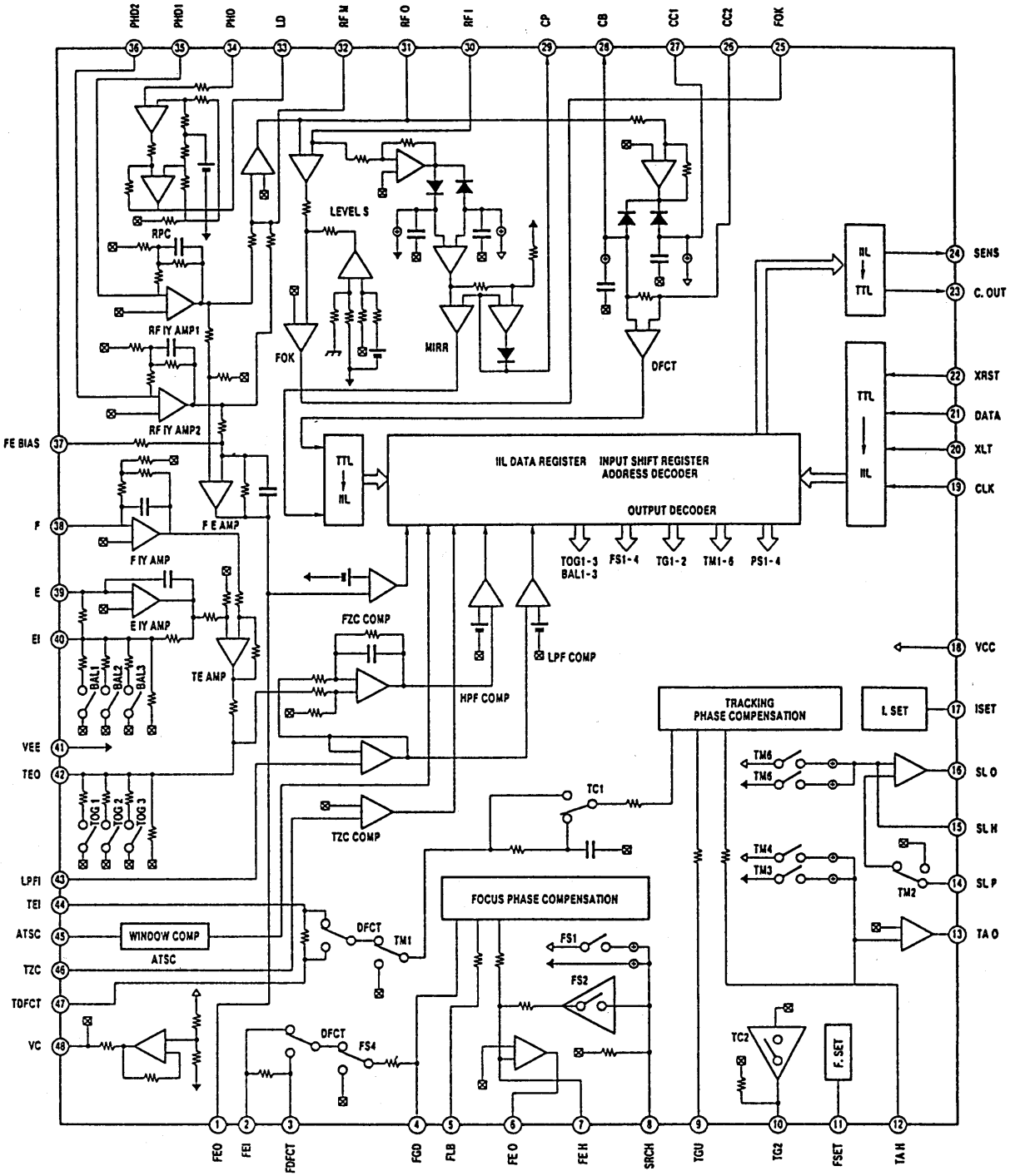
IC703 BA5930FP



IC802 S-2929AI10



IC701 CXA1782BQ



4-12. IC PIN DESCRIPTION

• Changer Control M34225M2-621FP (IC600)

Pin No.	Pin Name	I/O	Pin Description
1	RST	I	Changer system RESET pin
2	CH-RST	—	Connect to GND.
3	AGND	—	GND
4	AVREF	—	Connect to GND.
5, 6	KEY 1, 2	—	Connect to GND.
7	AVDD	—	Power supply (+5V)
8	—	—	Connect to GND.
9	LM1	O	LOAD/UNLOAD-MOTOR drive pins "LL" : Unload, "LH" : Rotation, "HH" : Brake
10	LM2	O	
11	UDM2	O	CH-HOLDER UP/DOWN-MOTOR drive pins "LL" :Unload, "LH" : Rotation, "HH" : Brake
12	UDM1	O	
13, 14	—	—	Connect to GND.
15	M1	I	MODE1-SW (Position detection at LOAD/UNLOAD) input pin
16	M2	I	MODE2-SW (Position detection at LOAD/UNLOAD) input pin
17, 18	DGND	—	GND
19	M3	I	MODE3-SW (Position detection at OPEN/CLOSE) input pin
20	CHUCKING	I	Chucking detection pin (At CH-HOLDER UP/DOWN)
21	M. STOCK	I	Chucking holder detection pin (At CH-HOLDER UP/DOWN)
22	F. P/I	I	Holder detection pin (At CH-HOLDER UP/DOWN)
23	D. P/R	I	Disc with/without detection at chucking "H" : without, "L" : with
24	DISC-ERR	—	Connect to GND.
25, 26	—	—	Connect to GND.
27	CH-CE	O	Chip-enable pin "H" : No communication, "L" : Communication OK
28	CH-CLK	I	SERIAL communication CLOCK pin
29	CH-DI	I	Command SERIAL input pin from SYSTEM μCOM. (8 bit)
30	CH-DO	O	Changer SERIAL output pin (8 bit)
31, 32	—	—	Connect to GND.
33	XOUT	O	Oscillation output pin (500kHz)
34	XIN	I	Oscillation input pin (500kHz)
35	—	—	Not used.
36	VDD	—	Power supply (+5V)

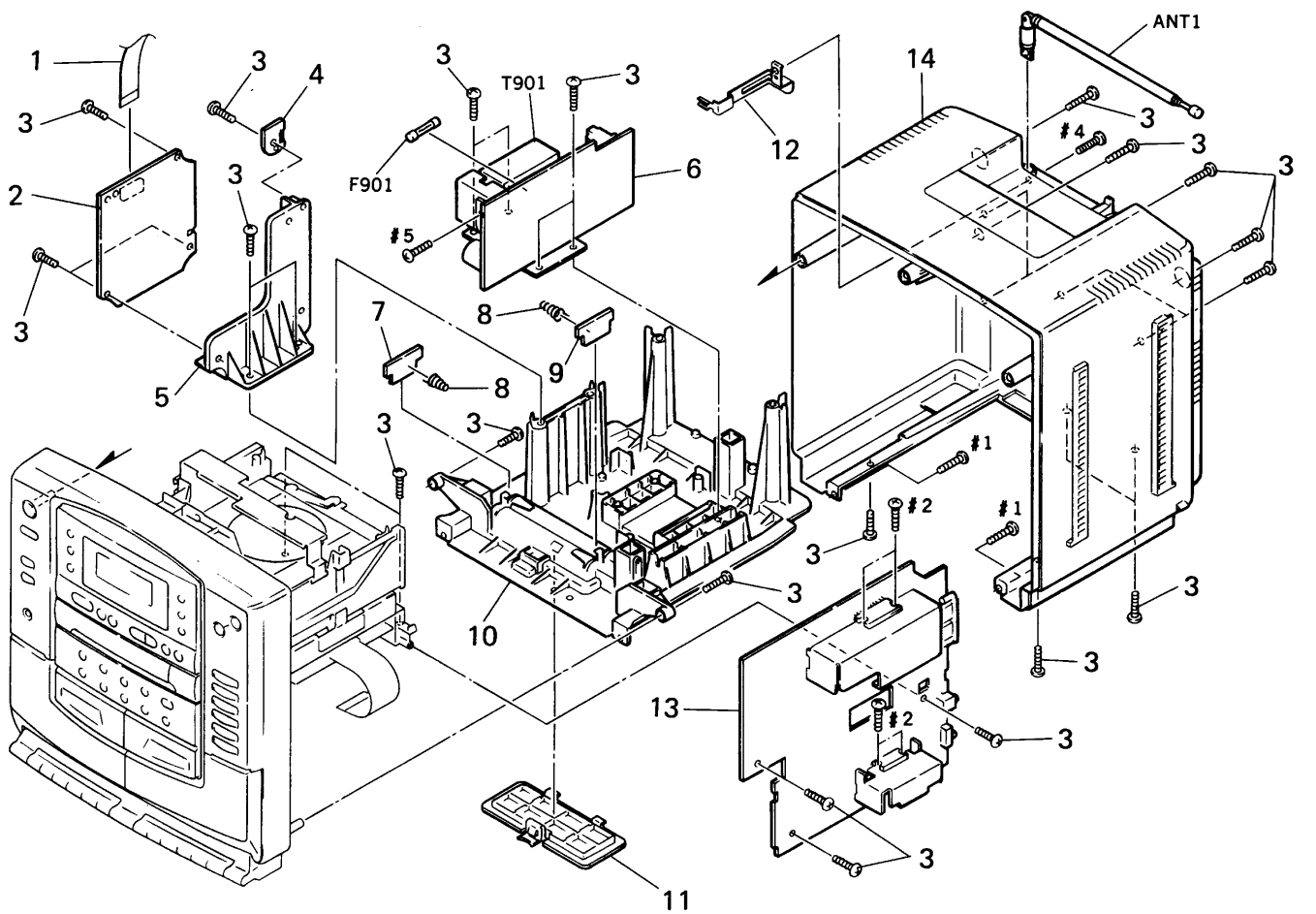
SECTION 5
EXPLODED VIEWS

NOTE:
- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example :
  KNOB, BALANCE (WHITE)... (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety.
Replace only with part number specified.

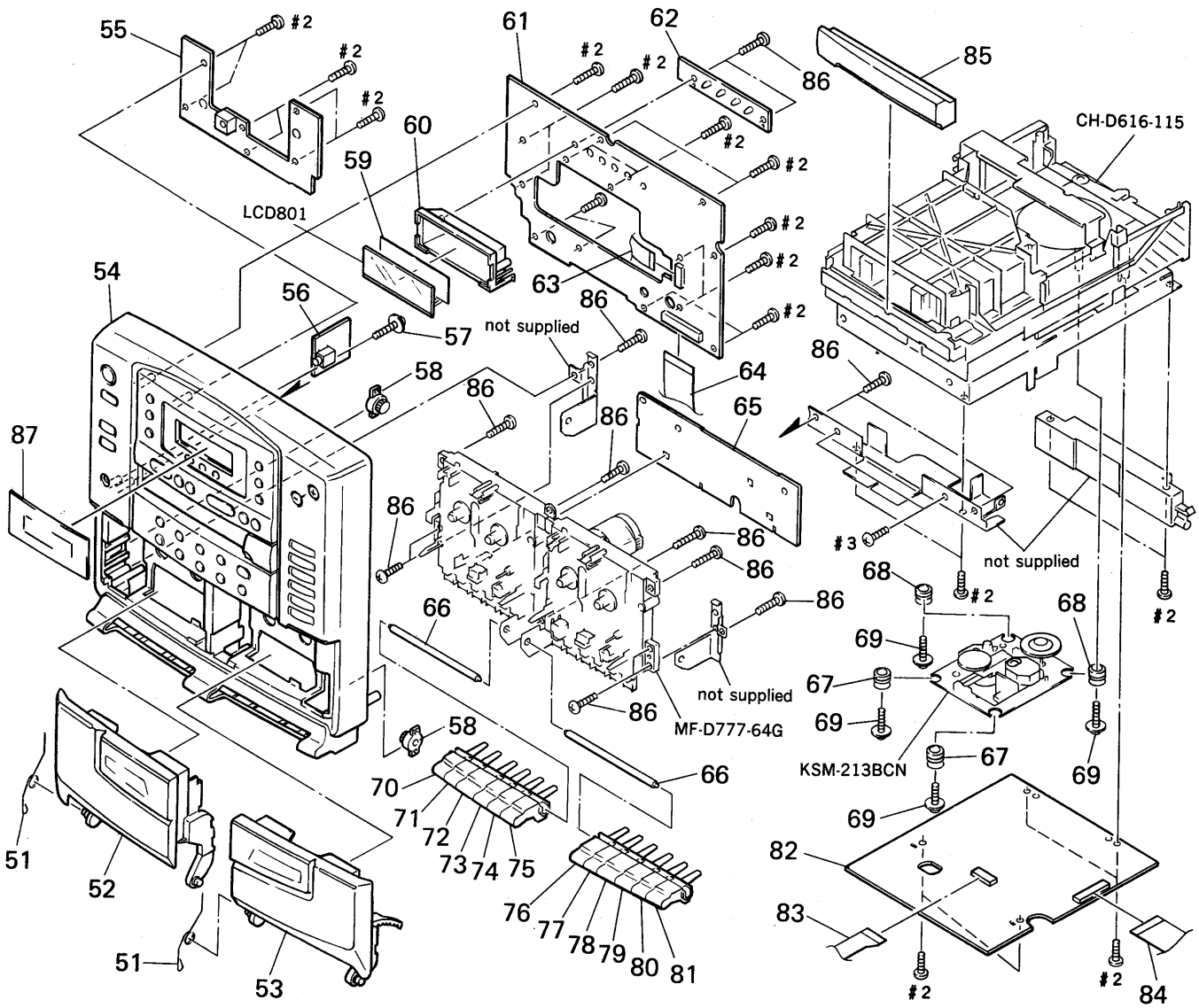
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

5-1. REAR CABINET SECTION



Ref. No.	Part No.	Description	Remark
1	1-769-476-11	WIRE, PARALLEL (FFC) (15 CORE)	
* 2	A-3305-094-A	TUNER BOARD, COMPLETE	
3	3-325-679-71	SCREW, TAPPING +BV 3X12	
* 4	1-655-830-11	ANT BOARD	
* 5	3-923-556-01	CHASSIS, TUNER	
* 6	1-655-656-11	POWER BOARD	
* 7	1-655-657-11	BATT (L) BOARD	
8	3-915-417-01	SPRING (S), BATTERY	
* 9	1-655-831-11	BATT (S) BOARD	
10	3-923-558-01	CHASSIS (LOWER)	
11	3-923-597-01	LID, BATTERY	
12	3-923-548-01	TERMINAL, ANT	
* 13	A-3305-096-A	MAIN BOARD, COMPLETE	
14	3-923-549-01	CABINET, REAR (676)	
14	3-923-549-31	CABINET, REAR (777)	
ANT1	1-501-452-11	ANTENNA, TELESCOPIC	
⚠F901	1-533-265-11	FUSE, GLASS TUBE (8A/125V)	
⚠T901	1-427-837-11	TRANSFORMER, POWER	

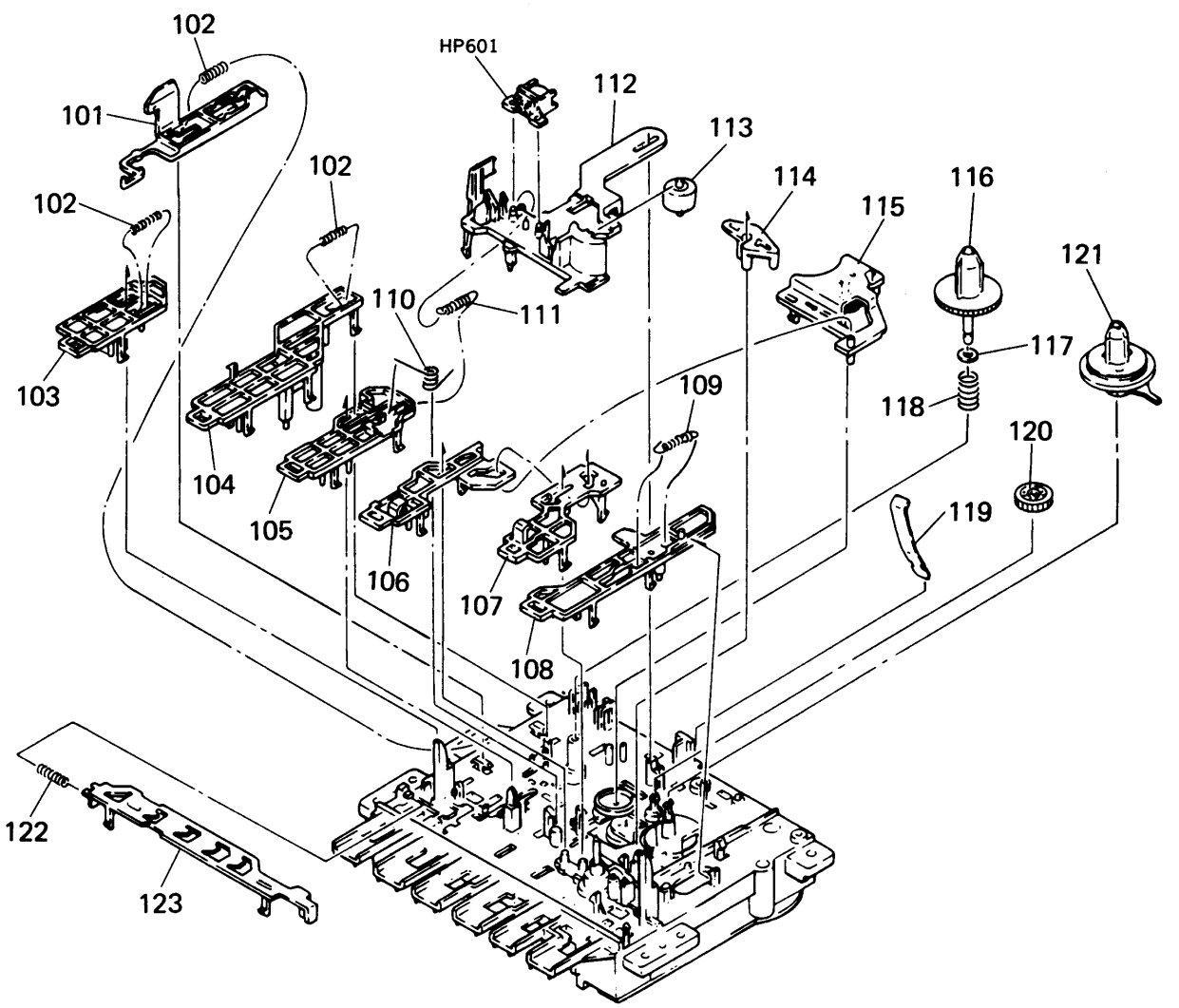
5-2. FRONT CABINET SECTION



Ref. No.	Part No.	Description	Remark
51	3-923-595-01	SPRING, CASSETTE OPEN	
52	X-3370-210-1	HOLDER SUB (A) ASSY, CASSETTE	
53	X-3370-211-1	HOLDER SUB (B) ASSY, CASSETTE	
54	X-3370-212-1	CABINET SUB ASSY, FRONT (777)	
54	X-3370-226-1	CABINET SUB ASSY, FRONT (676)	
* 55	1-655-654-11	SW BOARD	
* 56	1-655-652-11	H/P BOARD	
57	3-380-672-11	SCREW, WASHER	
58	3-343-248-01	DAMPER (P), SMALL	
59	3-927-297-01	ILLUMINATOR (777)	
* 60	3-923-582-01	HOLDER, LCD	
* 61	A-3305-085-A	CONTROL BOARD, COMPLETE	
* 62	1-655-655-11	LAMP BOARD	
63	1-769-475-11	WIRE, PARALLEL (FFC) (15 CORE)	
64	1-769-474-11	WIRE, PARALLEL (FFC) (25 CORE)	
* 65	A-3305-088-A	TC BOARD, COMPLETE	
66	3-923-571-01	SHAFT, MD	
67	3-910-095-01	RUBBER, VIBRATION PROOF	
68	3-910-095-11	RUBBER, VIBRATION PROOF	
69	3-921-725-01	SCREW, INSULATOR	

Ref. No.	Part No.	Description	Remark
70	3-923-563-01	BUTTON (STOP/EJECT-A), MD	
71	3-923-562-01	BUTTON (HI-SPEED/DUBBING), MD	
72	3-923-561-01	BUTTON (PLAY-A), MD	
73	3-923-560-01	BUTTON (REW-A), MD	
74	3-923-559-01	BUTTON (FF-A), MD	
75	3-923-570-01	BUTTON (PAUSE-A), MD	
76	3-923-564-01	BUTTON (STOP/EJECT-B), MD	
77	3-923-565-01	BUTTON (REC), MD	
78	3-923-566-01	BUTTON (PLAY-B), MD	
79	3-923-567-01	BUTTON (REW-B), MD	
80	3-923-568-01	BUTTON (FF-B), MD	
81	3-923-569-01	BUTTON (PAUSE-B), MD	
* 82	A-3276-783-A	CD CHANGER BOARD, COMPLETE	
83	1-656-478-11	FLEXIBLE BOARD	
84	1-769-473-11	WIRE, PARALLEL (FFC) (25 CORE)	
85	3-923-550-01	LID, CD	
86	3-325-679-71	SCREW, TAPPING +BV 3X12	
87	3-923-586-01	WINDOW, LCD	
LCD801	1-810-779-21	DISPLAY PANEL, LIQUID CRYSTAL	

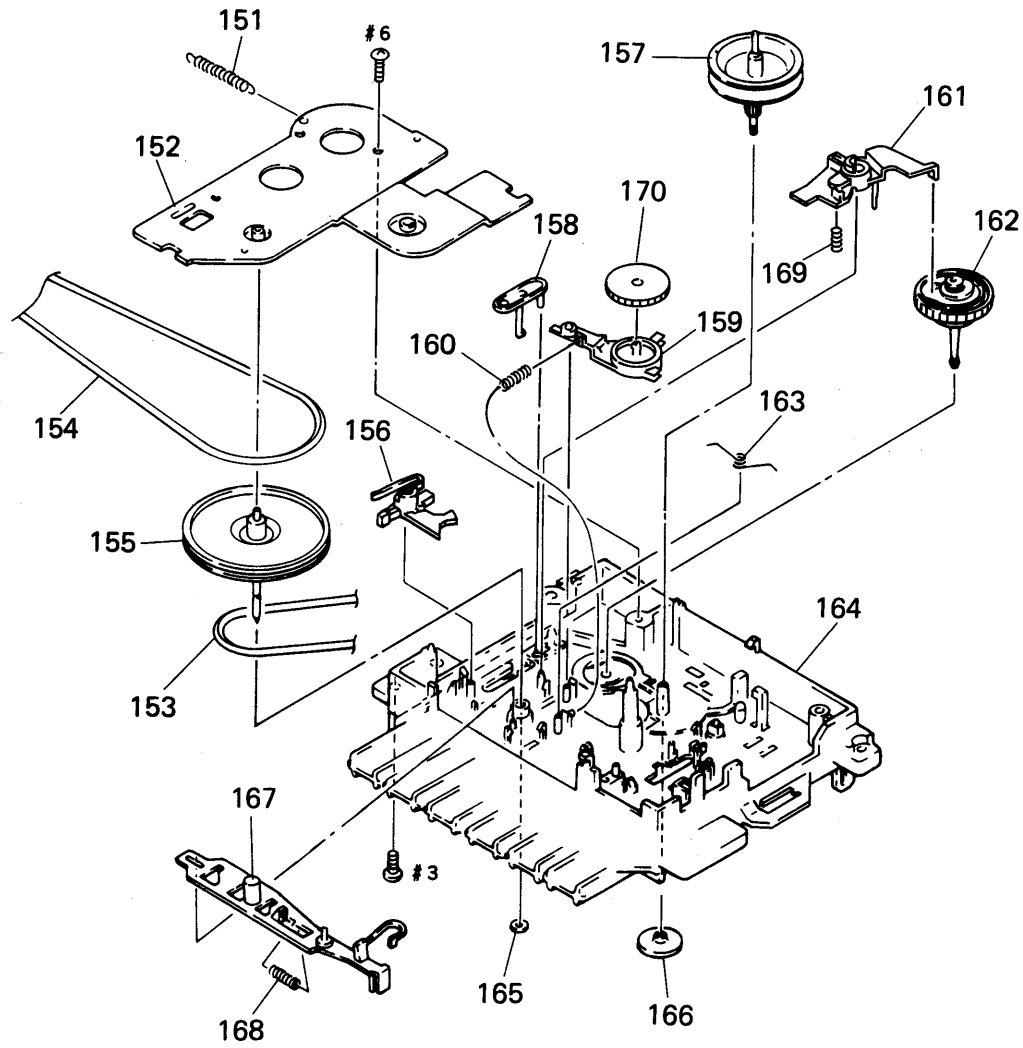
5-3. TAPE MECHANISM DECK SECTION (1) (MF-D777-64G) (DECK A)



Ref. No.	Part No.	Description	Remark
101	4-936-206-01	SLIDER (S), EJECT	
102	4-932-648-01	SPRING, COMPRESSION	
103	4-928-985-01	LEVER, STOP	
104	4-921-195-01	LEVER (AC), REC	
105	4-928-991-01	LEVER, PLAY	
106	4-928-992-01	LEVER, REW	
107	4-928-993-01	LEVER, FF	
108	4-928-994-01	LEVER, PAUSE	
109	3-313-372-01	SPRING, TENSION	
110	4-928-973-01	SPRING	
111	4-928-972-01	SPRING, TENSION	
112	4-932-693-03	DECK (S), HEAD	

Ref. No.	Part No.	Description	Remark
113	4-928-962-01	PINCH ROLLER	
114	4-928-982-01	LEVER (C)	
115	X-4920-347-1	LEVER (S) ASSY, FR	
116	4-928-978-01	GEAR (C), SUPPLY REEL	
117	4-931-795-11	WASHER	
118	3-343-381-01	SPRING, COMPRESSION	
119	4-928-957-01	RETAINER, CASSETTE	
120	3-343-285-01	GEAR, FF	
121	X-4920-350-3	GEAR (S) ASSY, T REEL	
122	4-932-656-11	SPRING, COMPRESSION	
123	4-932-695-01	SLIDER (FR), LOCK	
HP601	1-543-628-11	HEAD, MAGNETIC (PLAYBACK)	

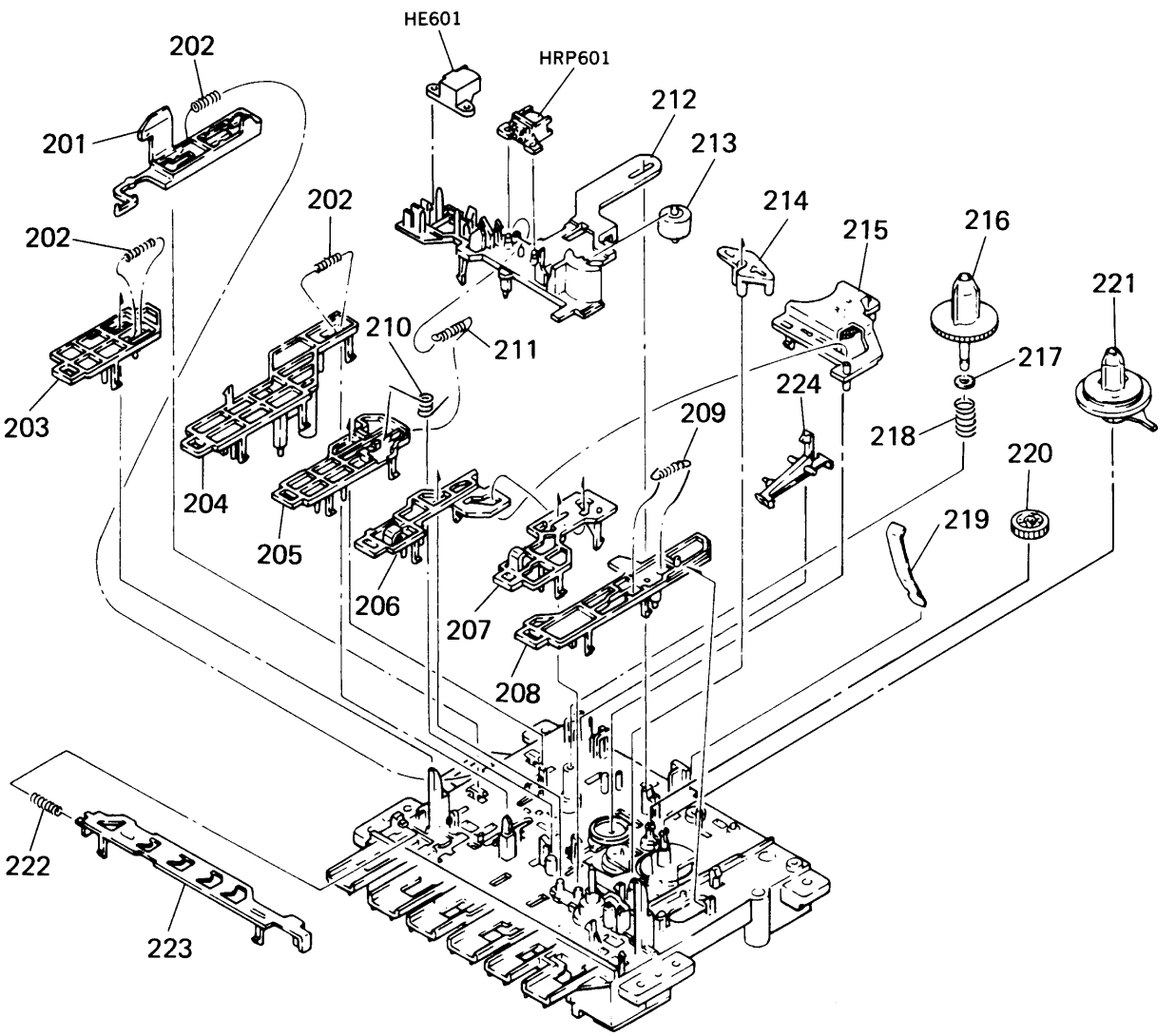
5-4. TAPE MECHANISM DECK SECTION (2) (MF-D777-64G) (DECK A)



Ref. No.	Part No.	Description	Remark
151	3-923-119-01	SPRING (STA), TENSION	
* 152	X-4918-598-1	PLATE ASSY, GROUND	
153	3-920-580-01	BELT (MIDWAY)	
154	3-378-419-01	BELT	
155	X-4920-923-1	WHEEL (W) ASSY, CAPSTAN	
156	3-904-620-21	LEVER (S.OFF) (T)	
157	X-3366-943-1	PULLEY ASSY, GEAR	
158	4-928-961-01	PLATE, PAUSE LOCK	
159	3-904-619-21	LEVER (FWD)	
160	3-905-168-01	SPRING, COMPRESSION	

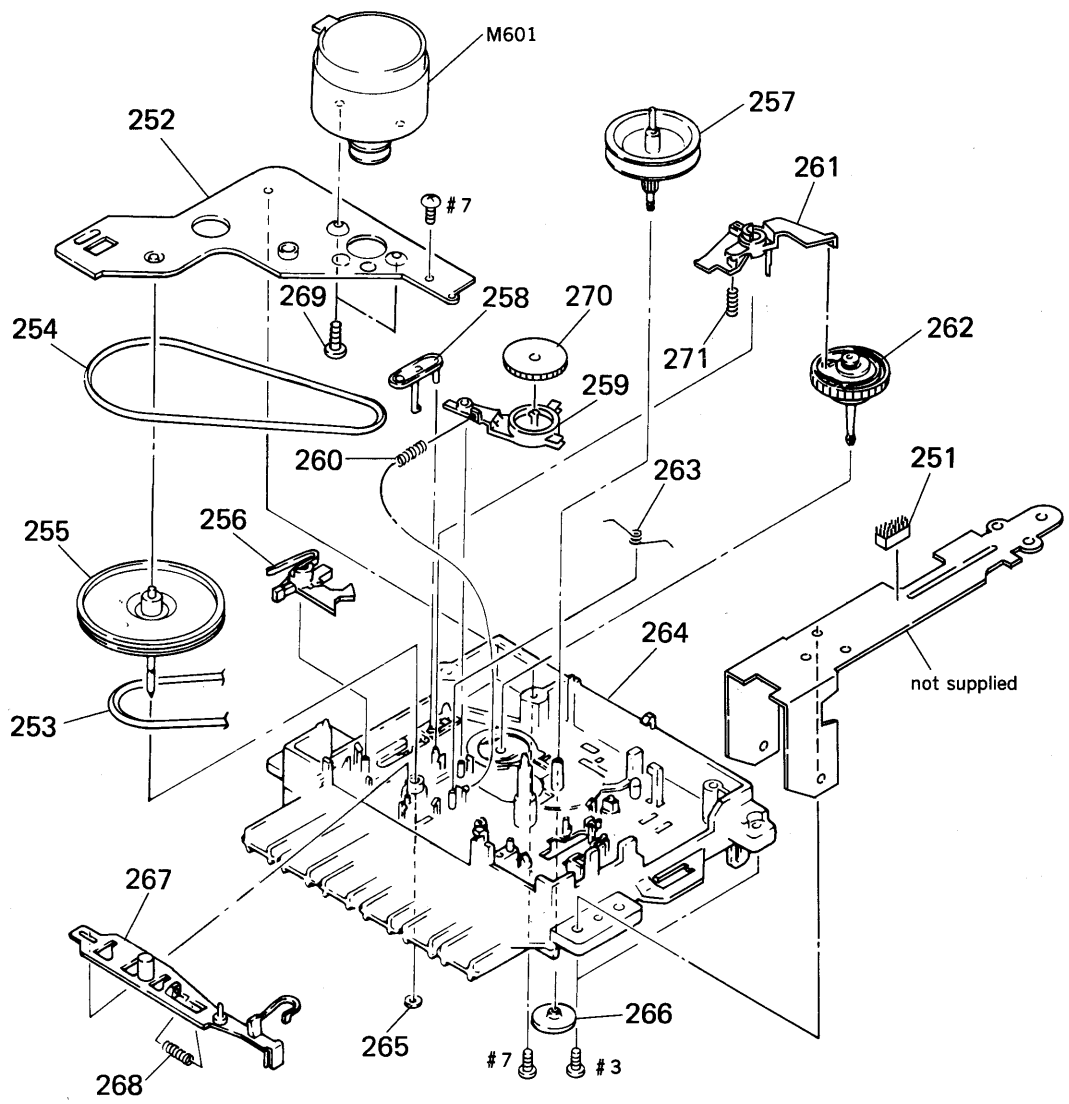
Ref. No.	Part No.	Description	Remark
161	3-904-621-21	LEVER (S.OFF) (S)	
162	X-3366-942-1	LIMITER ASSY, FWD	
163	4-928-958-01	SPRING, FR RETURN	
164	A-3208-379-A	CHASSIS (S) ASSY, MECHANISM	
165	3-343-358-01	RING, RETAINING	
166	4-928-967-01	GEAR (C), MIDWAY	
167	4-928-996-01	LEVER, SW	
168	4-932-648-01	SPRING, COMPRESSION	
169	3-904-617-01	SPRING, COMPRESSION	
170	3-904-615-21	GEAR (FWD)	

5-5. TAPE MECHANISM DECK SECTION (3) (MF-D777-64G) (DECK B)



Ref. No.	Part No.	Description	Remark
201	4-936-206-01	SLIDER (S), EJECT	
202	4-932-648-01	SPRING, COMPRESSION	
203	4-928-985-01	LEVER, STOP	
204	4-921-195-01	LEVER (AC), REC	
205	4-928-991-01	LEVER, PLAY	
206	4-928-992-01	LEVER, REW	
207	4-928-993-01	LEVER, FF	
208	4-928-994-01	LEVER, PAUSE	
209	3-313-372-01	SPRING, TENSION	
210	4-928-973-01	SPRING	
211	4-928-972-01	SPRING, TENSION	
212	4-921-196-01	DECK (AC), HEAD	
213	4-928-962-01	PINCH ROLLER	
214	4-928-982-01	LEVER (C)	
215	X-4920-347-1	LEVER (S) ASSY, FR	
216	4-928-978-01	GEAR (C), SUPPLY REEL	
217	4-931-795-11	WASHER	
218	3-343-381-01	SPRING, COMPRESSION	
219	4-928-957-01	RETAINER, CASSETTE	
220	3-343-285-01	GEAR, FF	
221	X-4920-350-3	GEAR (S) ASSY, T REEL	
222	4-932-656-11	SPRING, COMPRESSION	
223	4-932-695-01	SLIDER (FR), LOCK	
* 224	3-370-187-01	CLAW, ERASING PROTECTION	
HE601	1-543-535-11	HEAD, MAGNETIC (ERASE)	
HRP601	1-543-628-11	HEAD, MAGNETIC (RECORD/PLAYBACK)	

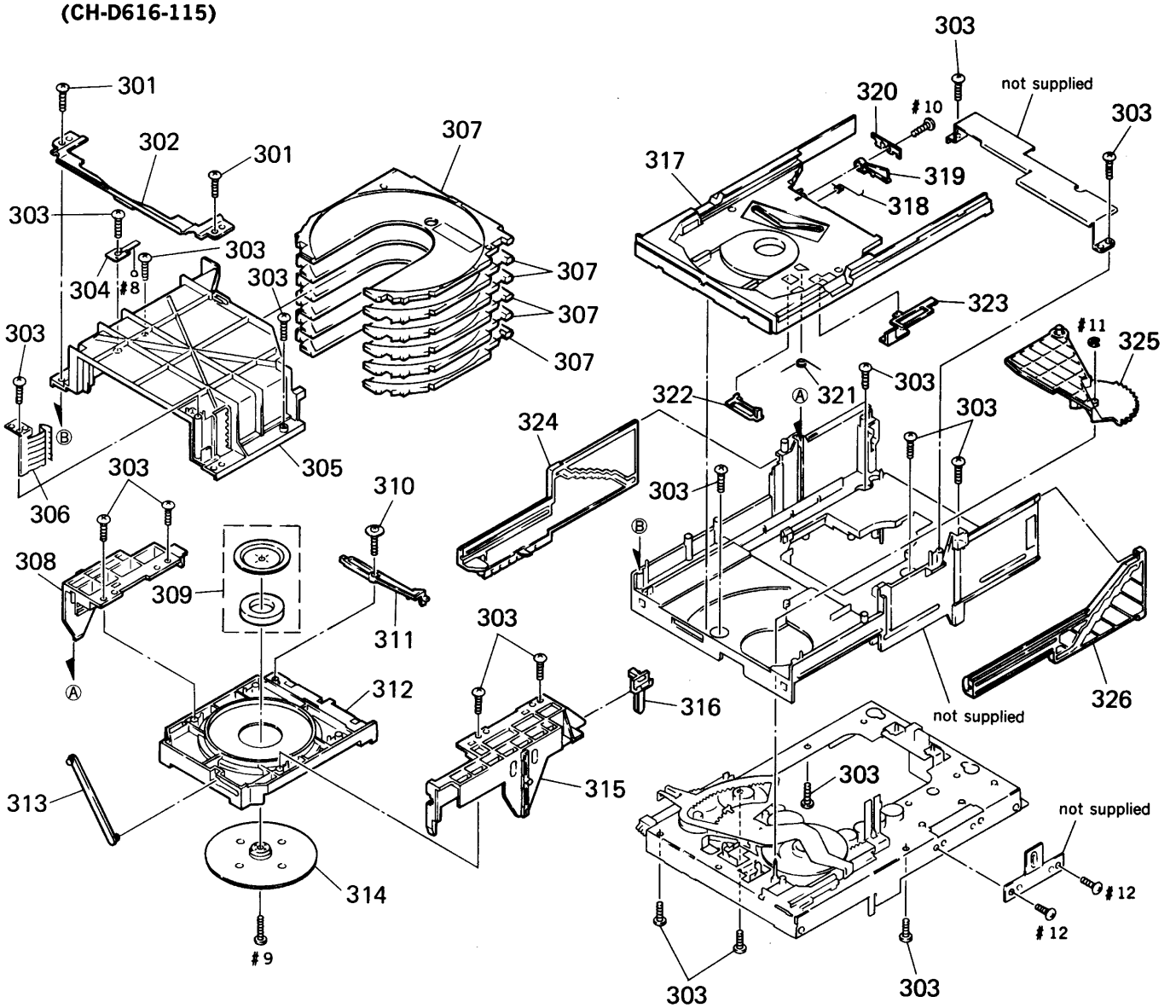
5-6. TAPE MECHANISM DECK SECTION (4) (MF-D777-64G) (DECK B)



Ref. No.	Part No.	Description	Remark
251	4-934-522-01	CUSHION	
252	X-4920-921-1	PLATE (W) ASSY, GROUND	
253	3-920-580-01	BELT (MIDWAY)	
254	4-934-520-01	BELT	
255	X-4920-923-1	WHEEL (W) ASSY, CAPSTAN	
256	3-904-620-21	LEVER (S.OFF) (T)	
257	X-3366-943-1	PULLEY ASSY, GEAR	
258	4-928-961-01	PLATE, PAUSE LOCK	
259	3-904-619-21	LEVER (FWD)	
260	3-905-168-01	SPRING, COMPRESSION	
261	3-904-621-21	LEVER (S.OFF) (S)	

Ref. No.	Part No.	Description	Remark
262	X-3366-942-1	LIMITER ASSY, FWD	
263	4-928-958-01	SPRING, FR RETURN	
264	A-3208-379-A	CHASSIS (S) ASSY, MECHANISM	
265	3-343-358-01	RING, RETAINING	
266	4-928-967-01	GEAR (C), MIDWAY	
267	4-928-996-01	LEVER, SW	
268	4-932-648-01	SPRING, COMPRESSION	
269	3-343-251-01	SCREW (M2.6X2.5)	
270	3-904-615-21	GEAR (FWD)	
271	3-904-617-01	SPRING, COMPRESSION	
M601	X-4920-924-1	MOTOR ASSY	

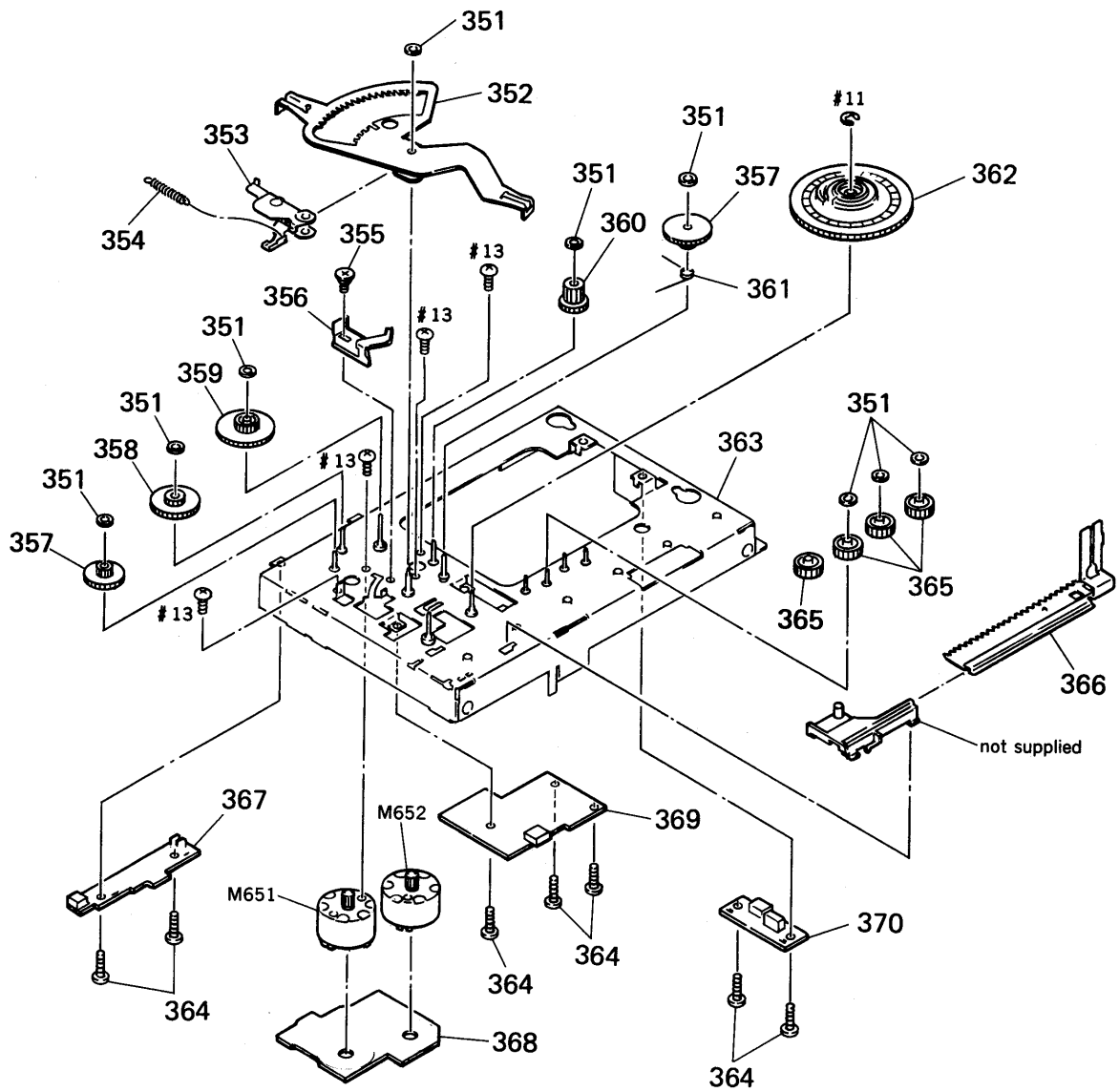
5-7. CHANGER SECTION (1)
(CH-D616-115)



Ref. No.	Part No.	Description	Remark
301	4-931-757-41	SCREW (DIA. 2.6X10) (IT3B)	
* 302	3-923-121-01	PLATE, STOP, CD	
303	4-931-757-31	SCREW (DIA. 2.6X8) (IT3B), TAPPING	
304	3-921-476-01	SPRING (F), CLICK	
305	3-921-443-01	STOCKER (A)	
306	3-921-455-01	SPRING (6 TUBE), STOCKER	
307	3-922-801-01	TRAY (SUB) (B)	
308	X-3369-859-1	HOLDER (L) ASSY, CH	
309	1-452-759-11	MAGNET	
310	3-921-725-01	SCREW, INSULATOR	
* 311	3-923-308-01	LEVER (SL)	
312	3-921-446-01	HOLDER, CH	
313	3-921-459-01	GUARD, DISC	

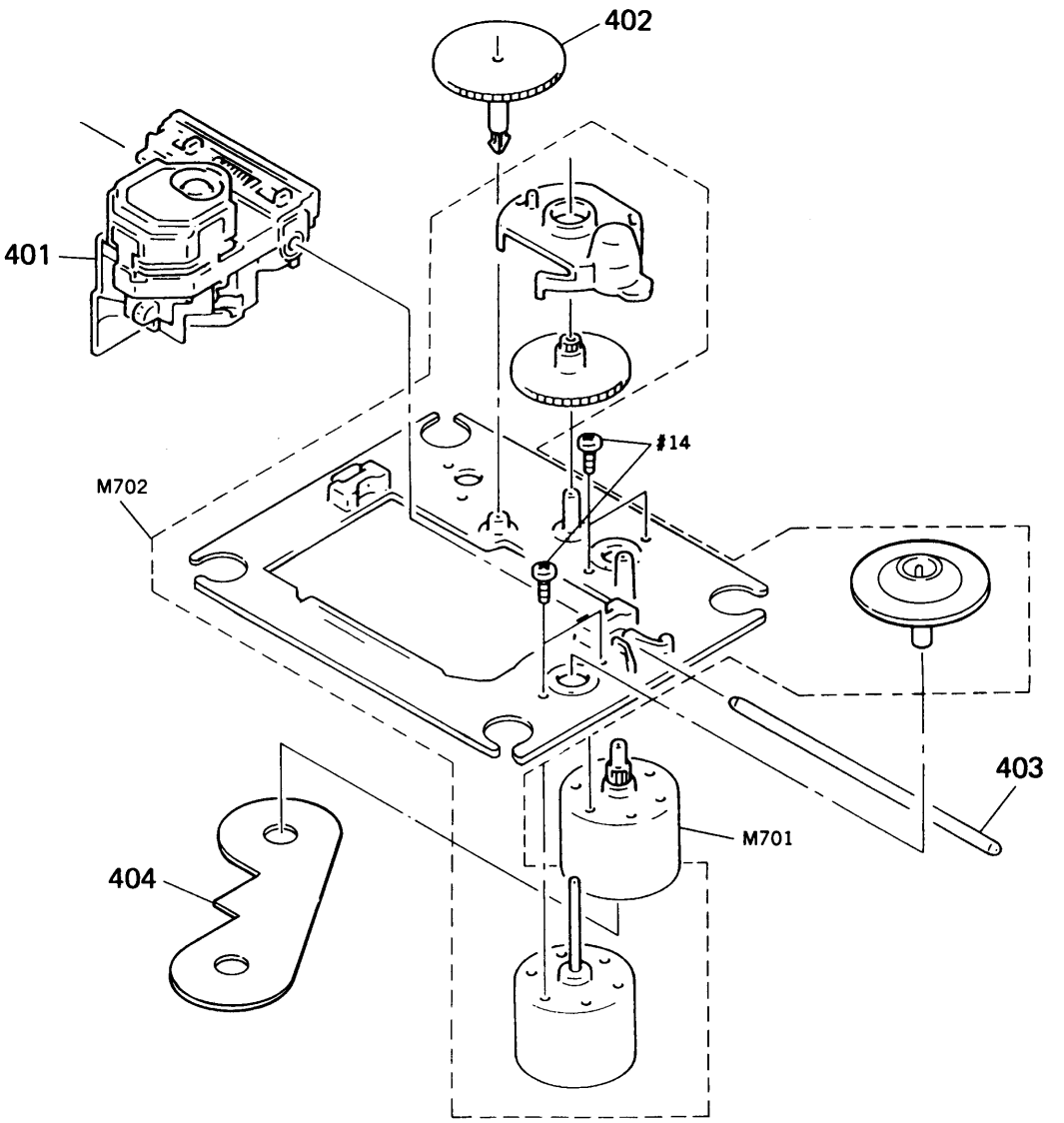
Ref. No.	Part No.	Description	Remark
314	3-921-458-01	PLATE, CHUCKING	
315	X-3369-715-1	HOLDER (R) ASSY, CH	
316	3-921-452-01	CLAW, ST	
317	X-3369-858-1	TRAY (MAIN) ASSY	
318	3-921-479-01	SPRING (CD STOPPER)	
319	3-921-483-01	STOPPER, CD	
320	3-921-482-01	REINFORCEMENT (CD STOPPER)	
321	3-923-118-01	SPRING (12CM), MAIN TRAY LOCK	
322	3-921-453-01	PLATE, LOCK	
323	3-921-454-01	RETAINER, PLATE, LOCK	
324	X-3369-856-1	SLIDER (F2) ASSY	
325	3-921-448-01	LEVER (T)	
326	X-3369-855-1	SLIDER (F1) ASSY	

5-8. CHANGER SECTION (2)
(CH-D616-115)



Ref. No.	Part No.	Description	Remark
351	3-307-948-01	WASHER, POLYESTER	
* 352	3-921-447-01	LEVER (F)	
353	X-3369-857-1	LEVER ASSY, ST DETECTION LOCK	
354	3-923-120-01	SPRING (STB), TENSION	
355	3-312-161-00	SCREW, STEP, PRECISION	
356	3-921-469-01	LEVER, ST RELEASE	
357	3-921-487-01	GEAR (L3)	
358	3-921-460-01	GEAR (F1)	
359	3-921-461-01	GEAR (F2)	
360	3-921-488-01	GEAR (L4)	
361	3-921-440-01	SPRING, RELEASE LEVER	
362	3-921-462-02	GEAR (L1)	
* 363	X-3369-854-1	CHASSIS (SUB) ASSY	
364	4-931-757-31	SCREW (DIA. 2.6X8) (IT3B), TAPPING	
365	3-921-463-01	GEAR (L2)	
* 366	3-921-449-01	SLIDER (L)	
* 367	1-655-626-11	FLOOR BOARD	
* 368	1-655-624-11	CHANGER MOTOR BOARD	
* 369	1-655-625-11	MODE BOARD	
* 370	1-655-627-11	DISC BOARD	
M651	X-3370-743-1	MOTOR ASSY (FLOOR UP/DOWN)	
M652	X-3370-743-1	MOTOR ASSY (TRAY LOAD)	

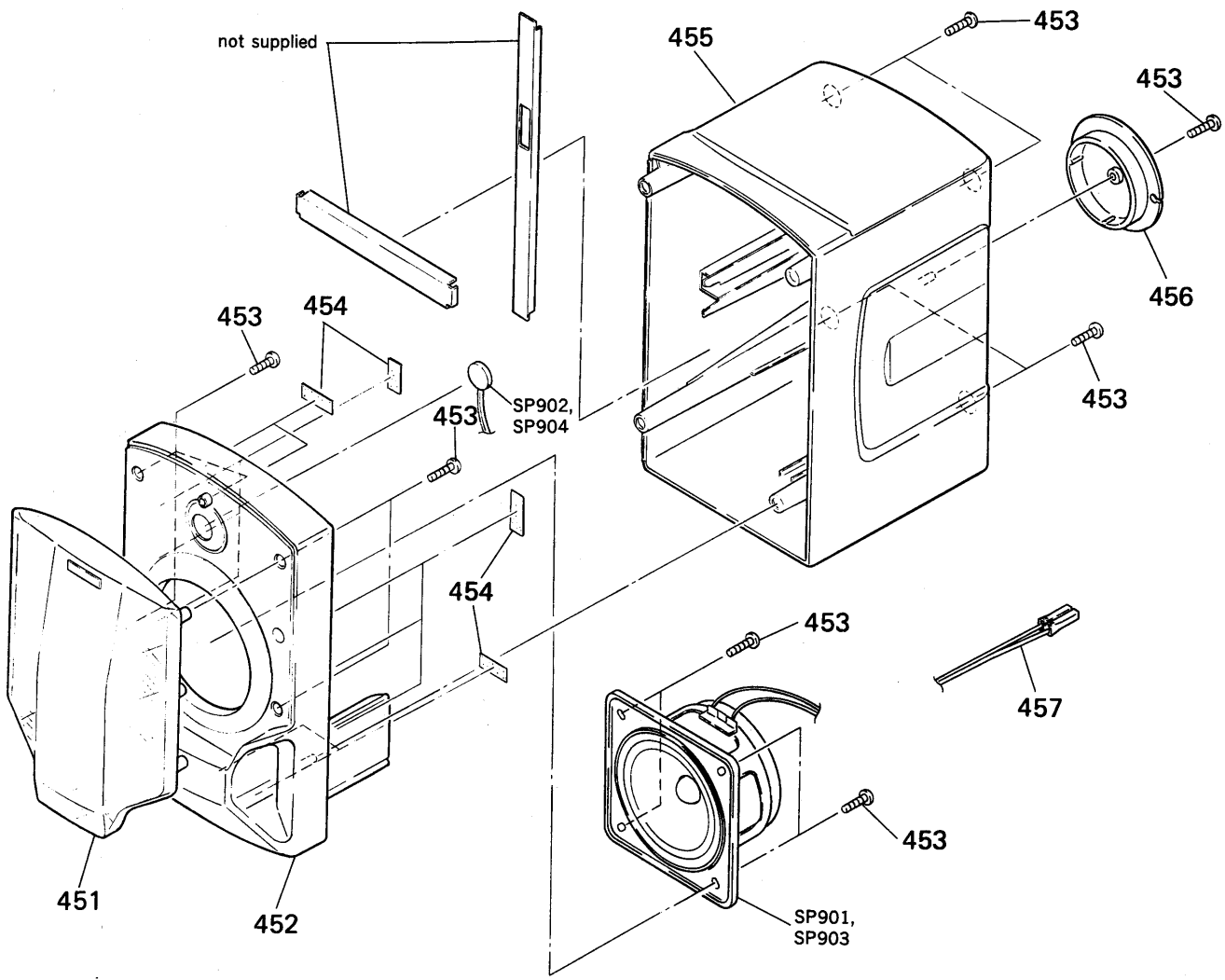
5-9. OPTICAL PICK-UP BLOCK (KSM-213BCN)



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
⚠401	8-848-367-11	PICK-UP, OPTICAL KSS-213B/K-N	
402	2-625-188-02	GEAR (A) (K)	
* 403	2-626-908-01	SHAFT, SLED	
* 404	1-655-629-21	CD MOTOR BOARD	
M701	X-2625-769-1	MOTOR GEAR ASSY (SLED)	
M702	X-2625-877-1	MOTOR ASSY, SPINDLE	

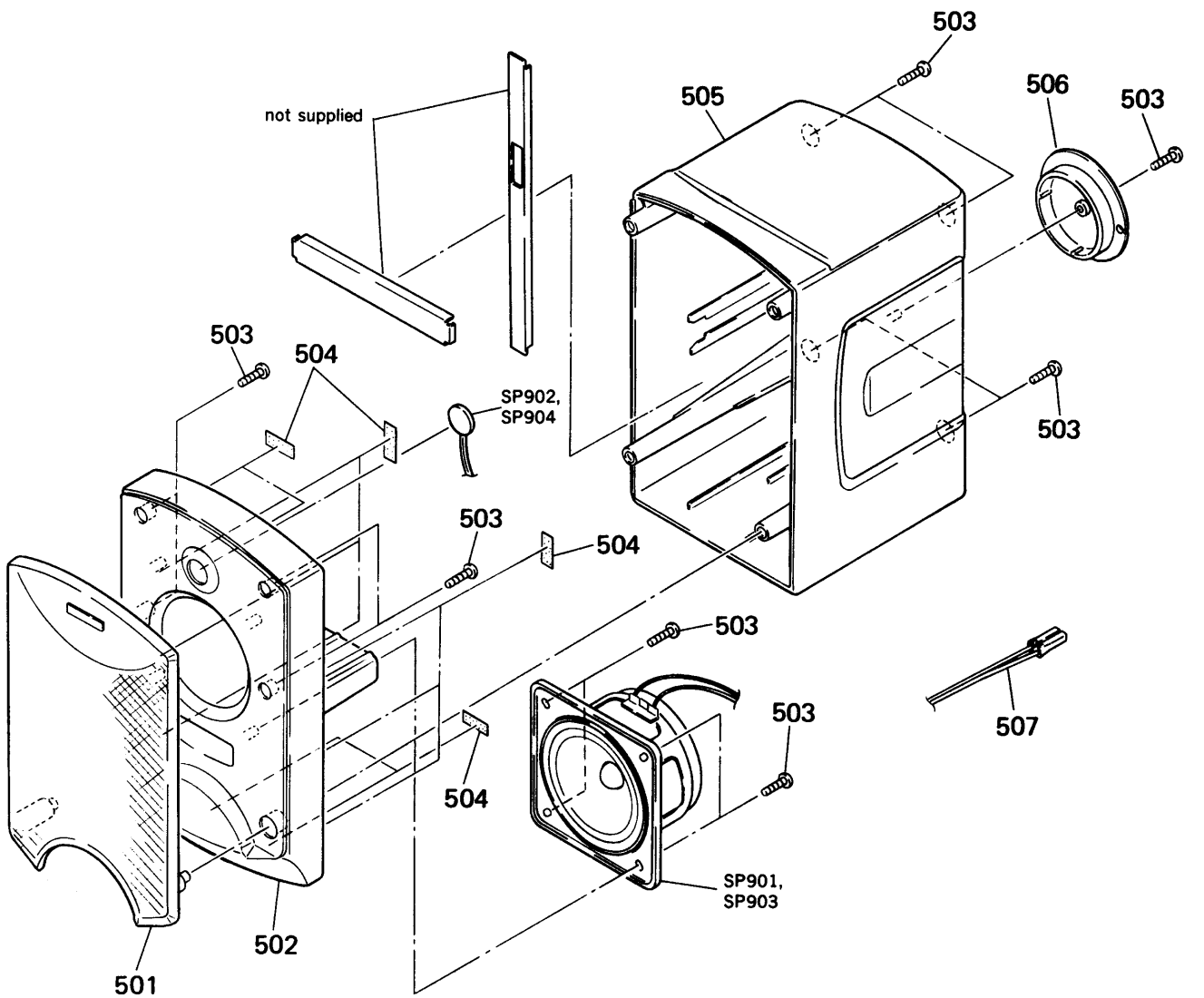
5-10. SPEAKER SECTION (1)
(CFD-676)



Ref. No.	Part No.	Description	Remark
451	X-3370-214-1	NET ASSY, SARAN	
452	3-923-606-01	PANEL (R), SPEAKER	
452	3-923-607-01	PANEL (L), SPEAKER	
453	3-325-679-71	SCREW, TAPPING +BV 3X12	
454	3-831-441-XX	CUSHION, SPEAKER	
455	3-923-602-01	CABINET (L), SPEAKER (REAR)	
455	3-923-603-01	CABINET (R), SPEAKER (REAR)	

Ref. No.	Part No.	Description	Remark
456	3-372-214-01	REEL, SPEAKER	
457	1-559-620-11	CORD (WITH CONNECTOR)	
SP901	1-504-939-11	SPEAKER	
SP902	1-529-058-11	BUZZER	
SP903	1-504-939-11	SPEAKER	
SP904	1-529-058-11	BUZZER	

5-11. SPEAKER SECTION (2)
(CFD-777)



Ref. No.	Part No.	Description	Remark
501	X-3370-213-1	NET ASSY, SARAN	
502	3-923-604-01	PANEL (L), SPEAKER	
502	3-923-605-01	PANEL (R), SPEAKER	
503	3-325-679-71	SCREW, TAPPING +BV 3X12	
504	3-831-441-XX	CUSHION, SPEAKER	
505	3-923-602-01	CABINET (L), SPEAKER (REAR)	
505	3-923-603-01	CABINET (R), SPEAKER (REAR)	
506	3-372-214-01	REEL, SPEAKER	
507	1-559-620-11	CORD (WITH CONNECTOR)	
SP901	1-504-939-11	SPEAKER	
SP902	1-529-058-11	BUZZER	
SP903	1-504-939-11	SPEAKER	
SP904	1-529-058-11	BUZZER	

SECTION 6
ELECTRICAL PARTS LIST

ANT **BATT (L)** **BATT (S)** **CD CHANGER**

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL:Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F:nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u:μ, for example:
  uA..: μA.. uPA..: μPA..
  uPB..: μPB.. uPC..: μPC.. uPD..: μPD..
- CAPACITORS
  uF: μF
- COILS
  uH: μH

When indicating parts by reference number, please include the board.

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description			Remark
*	1-655-830-11	ANT BOARD			
		*********			
**********					
*	1-655-657-11	BATT (L) BOARD			
		**********			
	3-915-417-01	SPRING (S), BATTERY			
**********					
*	1-655-831-11	BATT (S) BOARD			
		**********			
	3-915-417-01	SPRING (S), BATTERY			
**********					
*	A-3276-783-A	CD CHANGER BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C600	1-162-282-31	CERAMIC	100PF	10%	50V
C601	1-162-294-31	CERAMIC	0.001uF	10%	50V
C602	1-162-282-31	CERAMIC	100PF	10%	50V
C603	1-162-294-31	CERAMIC	0.001uF	10%	50V
C604-607					
	1-162-282-31	CERAMIC	100PF	10%	50V
C608-610					
	1-162-306-11	CERAMIC	0.01uF	30%	16V
C611-614					
	1-162-282-31	CERAMIC	100PF	10%	50V
C615	1-162-288-31	CERAMIC	330PF	10%	50V
C616	1-162-288-31	CERAMIC	330PF	10%	50V
C619	1-124-925-11	ELECT	2.2uF	20%	100V
C620	1-136-165-00	FILM	0.1uF	5%	50V
C621	1-104-664-11	ELECT	47uF	20%	10V
C622	1-124-443-00	ELECT	100uF	20%	10V
C624	1-124-443-00	ELECT	100uF	20%	10V
C700	1-162-306-11	CERAMIC	0.01uF	30%	16V
C701	1-162-302-11	CERAMIC	0.0022uF	30%	16V
C702-704					
	1-136-165-00	FILM	0.1uF	5%	50V
C705	1-131-375-00	TANTALUM	4.7uF	10%	10V
C706	1-130-489-00	MYLAR	0.033uF	5%	50V
C707	1-130-486-00	MYLAR	0.018uF	10%	50V
C708	1-162-199-31	CERAMIC	10PF	5%	50V
C709	1-126-162-11	ELECT	3.3uF	20%	50V
C710	1-130-493-00	MYLAR	0.068uF	5%	50V
C711	1-162-215-31	CERAMIC	47PF	5%	50V
C712	1-162-306-11	CERAMIC	0.01uF	30%	16V
C713	1-130-489-00	MYLAR	0.033uF	5%	50V
C714	1-162-306-11	CERAMIC	0.01uF	30%	16V
C715	1-130-489-00	MYLAR	0.033uF	5%	50V
C716	1-130-483-00	MYLAR	0.01uF	5%	50V
C717	1-104-664-11	ELECT	47uF	20%	10V
C718	1-124-907-11	ELECT	10uF	20%	50V
C721	1-130-491-00	MYLAR	0.047uF	5%	50V
C722	1-161-494-00	CERAMIC	0.022uF		25V
C723	1-136-165-00	FILM	0.1uF	5%	50V
C725	1-162-199-31	CERAMIC	10PF	5%	50V
C726	1-162-294-31	CERAMIC	0.001uF	10%	50V
C727	1-162-306-11	CERAMIC	0.01uF	30%	16V
C728	1-136-165-00	FILM	0.1uF	5%	50V
C729	1-124-589-11	ELECT	47uF	20%	16V
C730	1-124-472-11	ELECT	470uF	20%	10V
C731	1-162-294-31	CERAMIC	0.001uF	10%	50V
C732	1-130-484-00	MYLAR	0.012uF	5%	50V
C734	1-130-481-00	MYLAR	0.0068uF	5%	50V
C737	1-162-294-31	CERAMIC	0.001uF	10%	50V
C741	1-124-589-11	ELECT	47uF	20%	16V
C742	1-136-173-00	FILM	0.47uF	5%	50V
C743	1-162-301-11	CERAMIC	0.0015uF	20%	16V
C744	1-162-286-21	CERAMIC	220PF	10%	50V
C745	1-136-169-00	FILM	0.22uF	5%	50V
C746	1-162-306-11	CERAMIC	0.01uF	30%	16V
C747	1-130-483-00	MYLAR	0.01uF	5%	50V
C750	1-104-666-11	ELECT	220uF	20%	10V
C752	1-102-942-00	CERAMIC	5.0PF	0.5PF	50V
C753	1-102-942-00	CERAMIC	5.0PF	0.5PF	50V
C754	1-162-306-11	CERAMIC	0.01uF	30%	16V
C755	1-161-494-00	CERAMIC	0.022uF		25V
C756-759					
	1-162-306-11	CERAMIC	0.01uF	30%	16V

CD CHANGER

Ref. No.	Part No.	Description			Remark
C760	1-104-666-11	ELECT	220uF	20%	10V
C761	1-126-176-11	ELECT	220uF	20%	10V
C763	1-162-600-11	CERAMIC	0.0047uF	30%	16V
C764	1-126-163-11	ELECT	4.7uF	20%	50V
C773	1-162-600-11	CERAMIC	0.0047uF	30%	16V
C774	1-126-163-11	ELECT	4.7uF	20%	50V
C778	1-162-294-31	CERAMIC	0.001uF	10%	50V
C779	1-162-294-31	CERAMIC	0.001uF	10%	50V
C780	1-162-306-11	CERAMIC	0.01uF	30%	16V
C784	1-130-491-00	MYLAR	0.047uF	5%	50V
C786	1-136-165-00	FILM	0.1uF	5%	50V
C787	1-104-666-11	ELECT	220uF	20%	10V
C788	1-136-165-00	FILM	0.1uF	5%	50V
C789	1-162-282-31	CERAMIC	100PF	10%	50V
C791	1-162-282-31	CERAMIC	100PF	10%	50V
C795	1-162-282-31	CERAMIC	100PF	10%	50V
C796	1-162-306-11	CERAMIC	0.01uF	30%	16V
C798	1-162-306-11	CERAMIC	0.01uF	30%	16V
C799	1-162-294-31	CERAMIC	0.001uF	10%	50V
		< CONNECTOR >			
CN311	1-691-084-21	HOUSING, CONNECTOR 25P			
* CN602	1-506-999-11	PIN, CONNECTOR (PC BOARD) 3P			
* CN603	1-566-001-11	PIN, CONNECTOR (PC BOARD) 4P			
* CN604	1-566-002-11	PIN, CONNECTOR (PC BOARD) 5P			
* CN605	1-566-003-11	PIN, CONNECTOR (PC BOARD) 6P			
CN701	1-770-673-11	CONNECTOR, FFC/FPC (ZIF) 16P			
* CN703	1-506-988-11	PIN, CONNECTOR (PC BOARD) 6P			
		< DIODE >			
D600	8-719-991-33	DIODE	1SS133T-77		
D601	8-719-109-97	DIODE	RD6.8ES-B2		
D704	8-719-986-73	DIODE	RB441Q		
D705	8-719-991-33	DIODE	1SS133T-77		
D706	8-719-991-33	DIODE	1SS133T-77		
		< FERRITE BEAD >			
FB701-703	1-410-397-21	FERRITE BEAD INDUCTOR			
FB705	1-410-397-21	FERRITE BEAD INDUCTOR			
FB711	1-410-397-21	FERRITE BEAD INDUCTOR			
FB721	1-410-397-21	FERRITE BEAD INDUCTOR			
		< IC >			
IC600	8-759-330-97	IC	M34225M2-621FP		
IC701	8-752-069-56	IC	CXA1782BQ		
IC702	8-752-372-94	IC	CXD2507AQ		
IC703	8-759-336-75	IC	BA5930FP		
IC704	8-759-283-60	IC	SM5875AM-ET		

Ref. No.	Part No.	Description			Remark
		< COIL >			
L600	1-410-521-11	INDUCTOR	100uH		
		< TRANSISTOR >			
Q600	8-729-031-10	TRANSISTOR	2SD1961-T103-RS		
Q601	8-729-119-78	TRANSISTOR	2SC2785-HFE		
Q602	8-729-119-78	TRANSISTOR	2SC2785-HFE		
Q603	8-729-904-36	TRANSISTOR	DTC114YS		
Q701	8-729-801-84	TRANSISTOR	2SB1013-4		
Q702	8-729-900-85	TRANSISTOR	DTC144WS		
Q703	8-729-900-74	TRANSISTOR	DTC143TS		
Q705	8-729-902-80	TRANSISTOR	DTA114YS		
Q760	8-729-900-74	TRANSISTOR	DTC143TS		
Q770	8-729-900-74	TRANSISTOR	DTC143TS		
		< RESISTOR >			
R600	1-249-429-11	CARBON	10K	5%	1/4W
R601	1-249-429-11	CARBON	10K	5%	1/4W
R602-615	1-249-417-11	CARBON	1K	5%	1/4W
R616-619	1-249-429-11	CARBON	10K	5%	1/4W
R620	1-249-417-11	CARBON	1K	5%	1/4W
R621-623	1-249-429-11	CARBON	10K	5%	1/4W
R624	1-247-903-00	CARBON	1M	5%	1/4W
R625	1-249-429-11	CARBON	10K	5%	1/4W
R627	1-249-441-11	CARBON	100K	5%	1/4W
R628	1-249-411-11	CARBON	330	5%	1/4W
R629	1-249-429-11	CARBON	10K	5%	1/4W
R630	1-249-429-11	CARBON	10K	5%	1/4W
R632	1-249-429-11	CARBON	10K	5%	1/4W
R633	1-249-433-11	CARBON	22K	5%	1/4W
R634	1-249-437-11	CARBON	47K	5%	1/4W
R635	1-249-433-11	CARBON	22K	5%	1/4W
R636	1-249-433-11	CARBON	22K	5%	1/4W
R637	1-249-429-11	CARBON	10K	5%	1/4W
R638	1-249-429-11	CARBON	10K	5%	1/4W
R700	1-249-429-11	CARBON	10K	5%	1/4W
R701	1-249-441-11	CARBON	100K	5%	1/4W
R702	1-247-896-11	CARBON	510K	5%	1/4W
R703	1-249-441-11	CARBON	100K	5%	1/4W
R704	1-247-883-00	CARBON	150K	5%	1/4W
R705	1-249-437-11	CARBON	47K	5%	1/4W
R706	1-249-441-11	CARBON	100K	5%	1/4W
R707	1-249-432-11	CARBON	18K	5%	1/4W
R708	1-247-883-00	CARBON	150K	5%	1/4W
R709	1-247-862-11	CARBON	20K	5%	1/4W
R710	1-249-393-11	CARBON	10	5%	1/4W

Ref. No.	Part No.	Description				Remark
R711	1-249-417-11	CARBON	1K	5%	1/4W	
R714	1-247-883-00	CARBON	150K	5%	1/4W	
R715	1-249-417-11	CARBON	1K	5%	1/4W	
R716	1-249-430-11	CARBON	12K	5%	1/4W	
R717	1-249-429-11	CARBON	10K	5%	1/4W	
R718	1-247-899-11	CARBON	680K	5%	1/4W	
R720	1-247-891-00	CARBON	330K	5%	1/4W	
R725	1-249-437-11	CARBON	47K	5%	1/4W	
R726	1-249-429-11	CARBON	10K	5%	1/4W	
R727	1-249-429-11	CARBON	10K	5%	1/4W	
R728	1-249-435-11	CARBON	33K	5%	1/4W	
R729	1-249-433-11	CARBON	22K	5%	1/4W	
R730	1-249-435-11	CARBON	33K	5%	1/4W	
R731	1-249-433-11	CARBON	22K	5%	1/4W	
R732	1-249-429-11	CARBON	10K	5%	1/4W	
R733	1-249-435-11	CARBON	33K	5%	1/4W	
R734	1-249-437-11	CARBON	47K	5%	1/4W	
R735	1-249-425-11	CARBON	4.7K	5%	1/4W	
R736	1-249-429-11	CARBON	10K	5%	1/4W	
R737	1-249-417-11	CARBON	1K	5%	1/4W	
R738	1-247-807-31	CARBON	100	5%	1/4W	
R739	1-249-417-11	CARBON	1K	5%	1/4W	
R740	1-249-423-11	CARBON	3.3K	5%	1/4W	
R741	1-249-417-11	CARBON	1K	5%	1/4W	
R742	1-249-423-11	CARBON	3.3K	5%	1/4W	
R743	1-247-903-00	CARBON	1M	5%	1/4W	
R744	1-247-887-00	CARBON	220K	5%	1/4W	
R745	1-249-429-11	CARBON	10K	5%	1/4W	
R746	1-249-437-11	CARBON	47K	5%	1/4W	
R747	1-249-417-11	CARBON	1K	5%	1/4W	
R748	1-249-429-11	CARBON	10K	5%	1/4W	
R749	1-249-429-11	CARBON	10K	5%	1/4W	
R750	1-249-409-11	CARBON	220	5%	1/4W	
R751-753						
	1-249-429-11	CARBON	10K	5%	1/4W	
R754	1-249-417-11	CARBON	1K	5%	1/4W	
R755	1-249-429-11	CARBON	10K	5%	1/4W	
R756-768						
	1-249-417-11	CARBON	1K	5%	1/4W	
R770	1-249-417-11	CARBON	1K	5%	1/4W	
R772	1-249-429-11	CARBON	10K	5%	1/4W	
R773	1-249-417-11	CARBON	1K	5%	1/4W	
R774	1-249-417-11	CARBON	1K	5%	1/4W	
R775	1-249-429-11	CARBON	10K	5%	1/4W	
R776	1-249-417-11	CARBON	1K	5%	1/4W	
R780-783						
	1-249-439-11	CARBON	68K	5%	1/4W	
R784	1-249-440-11	CARBON	82K	5%	1/4W	
R785	1-249-440-11	CARBON	82K	5%	1/4W	

Ref. No.	Part No.	Description				Remark
R790	1-249-433-11	CARBON	22K	5%	1/4W	
R791	1-249-425-11	CARBON	4.7K	5%	1/4W	
R792	1-249-429-11	CARBON	10K	5%	1/4W	
R795	1-247-807-31	CARBON	100	5%	1/4W	

< VARIABLE RESISTOR >

RV701	1-230-497-11	RES, ADJ, CARBON	22K
RV702	1-230-497-11	RES, ADJ, CARBON	22K
RV703	1-230-495-11	RES, ADJ, CARBON	2.2K
RV704	1-230-497-11	RES, ADJ, CARBON	22K

< VIBRATOR >

X600	1-760-587-11	VIBRATOR, CERAMIC (500kHz)
X701	1-579-345-11	VIBRATOR, CERAMIC (16.93MHz)

****

* 1-655-629-21 CD MOTOR BOARD
****

< CONNECTOR >

* CNP707 1-566-003-11 PIN, CONNECTOR (PC BOARD) 6P

< SWITCH >

S701 1-571-936-11 SWITCH, LEAF (LIMIT)

****

* 1-655-624-11 CHANGER MOTOR BOARD
****

< CAPACITOR >

C655	1-104-664-11	ELECT	47uF	20%	10V

< IC >

IC651	8-759-962-08	IC	BA6208
IC652	8-759-962-08	IC	BA6208

****

* A-3305-085-A CONTROL BOARD, COMPLETE
****

3-325-679-71 SCREW, TAPPING +BV 3X12
* 3-923-582-01 HOLDER, LCD
3-927-297-01 ILLUMINATOR (777)

< CAPACITOR >

C801	1-163-237-11	CERAMIC CHIP	27PF	5%	50V
C802	1-163-237-11	CERAMIC CHIP	27PF	5%	50V
C803	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C804	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C805	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V

CONTROL

Ref. No.	Part No.	Description			Remark
C806	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C808	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C809	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C810	1-124-477-11	ELECT	47uF	20%	25V
C811	1-124-477-11	ELECT	47uF	20%	25V
C812-816					
	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C817	1-124-477-11	ELECT	47uF	20%	25V
C824	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C825	1-164-346-11	CERAMIC CHIP	1uF		16V
		< CONNECTOR >			
CN802	1-691-074-11	HOUSING, CONNECTOR 15P			
CN803	1-691-084-21	HOUSING, CONNECTOR 25P			
CN804	1-506-491-11	PIN, CONNECTOR 12P			
		< DIODE >			
D801	8-719-052-65	LED SLR-342DUA47 (1 (DISC))			
D802	8-719-052-65	LED SLR-342DUA47 (2 (DISC))			
D803	8-719-052-65	LED SLR-342DUA47 (3 (DISC))			
D804	8-719-052-65	LED SLR-342DUA47 (4 (DISC))			
D805	8-719-052-65	LED SLR-342DUA47 (5 (DISC))			
D806	8-719-052-65	LED SLR-342DUA47 (6 (DISC))			
D812	8-719-914-43	DIODE DAN202K			
		< IC >			
IC801	8-759-357-36	IC MSM65354-401GS-BK4			
IC802	8-759-330-94	IC S-2929AI10			
IC803	8-759-249-81	IC S-806J			
		< JUMPER RESISTOR >			
JW900	1-216-296-00	CHIP CONDUCTOR (3216)			
		< COIL >			
L801	1-410-993-11	INDUCTOR CHIP	1uH		
L802	1-410-393-11	INDUCTOR CHIP	100uH		
L803	1-410-393-11	INDUCTOR CHIP	100uH		
		< LIQUID CRYSTAL DISPLAY >			
LCD801	1-810-779-21	DISPLAY PANEL, LIQUID CRYSTAL			
		< TRANSISTOR >			
Q801	8-729-900-52	TRANSISTOR DTC114YK			
Q802	8-729-900-52	TRANSISTOR DTC114YK			
Q803	8-729-900-52	TRANSISTOR DTC114YK			
Q804	8-729-900-52	TRANSISTOR DTC114YK			
Q805	8-729-900-52	TRANSISTOR DTC114YK			
Q806	8-729-900-52	TRANSISTOR DTC114YK			
Q807	8-729-900-52	TRANSISTOR DTC114YK			
Q808	8-729-900-52	TRANSISTOR DTC114YK			
Q812	8-729-601-58	TRANSISTOR 2SC3053-C			
Q813	8-729-601-58	TRANSISTOR 2SC3053-C			
Q815	8-729-900-52	TRANSISTOR DTC114YK			
		< RESISTOR >			
R808	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R809	1-216-079-00	METAL CHIP	18K	5%	1/10W
R810	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R811	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R812	1-216-055-00	METAL CHIP	1.8K	5%	1/10W
R813	1-216-051-00	METAL CHIP	1.2K	5%	1/10W
R816	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R817	1-216-079-00	METAL CHIP	18K	5%	1/10W
R818	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R819	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R820	1-216-055-00	METAL CHIP	1.8K	5%	1/10W
R821	1-216-051-00	METAL CHIP	1.2K	5%	1/10W
R822	1-216-047-00	METAL GLAZE	820	5%	1/10W
R823	1-216-045-00	METAL CHIP	680	5%	1/10W
R824	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R825	1-216-079-00	METAL CHIP	18K	5%	1/10W
R826	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R827	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R828	1-216-055-00	METAL CHIP	1.8K	5%	1/10W
R829	1-216-051-00	METAL CHIP	1.2K	5%	1/10W
R832	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R834	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R835	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R836	1-216-055-00	METAL CHIP	1.8K	5%	1/10W
R839	1-216-045-00	METAL CHIP	680	5%	1/10W
R840	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R844-849					
	1-216-037-00	METAL CHIP	330	5%	1/10W
R850	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R851	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R852	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R853	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R854	1-216-041-00	METAL CHIP	470	5%	1/10W
R855	1-216-073-00	METAL CHIP	10K	5%	1/10W
R856	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R857-859					
	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R860	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R861	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R868	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R937-945					
	1-216-049-11	METAL GLAZE	1K	5%	1/10W

Ref.No.	Part No.	Description			Remark
R947-967					
	1-216-049-11	METAL GLAZE	1K	5% 1/10W	
R969	1-216-065-00	METAL CHIP	4.7K	5% 1/10W	
R970-981					
	1-216-049-11	METAL GLAZE	1K	5% 1/10W	
R982	1-216-073-00	METAL CHIP	10K	5% 1/10W	
R983	1-216-049-11	METAL GLAZE	1K	5% 1/10W	
R984	1-216-073-00	METAL CHIP	10K	5% 1/10W	
		< SWITCH >			
S801	1-572-199-11	SWITCH, KEY BOARD (A.AGC)			
S808	1-572-199-11	SWITCH, KEY BOARD (POWER)			
S812	1-572-199-11	SWITCH, KEY BOARD (SHUFFLE)			
S813	1-572-199-11	SWITCH, KEY BOARD (CONTINUE)			
S814	1-572-199-11	SWITCH, KEY BOARD (OPEN/CLOSE ⏏)			
S817	1-572-199-11	SWITCH, KEY BOARD (- (VOLUME))			
S818	1-572-199-11	SWITCH, KEY BOARD (+ (VOLUME))			
S819	1-572-199-11	SWITCH, KEY BOARD (6 (DISC))			
S820	1-572-199-11	SWITCH, KEY BOARD (5 (DISC))			
S821	1-572-199-11	SWITCH, KEY BOARD (4 (DISC))			
S822	1-572-199-11	SWITCH, KEY BOARD (3 (DISC))			
S823	1-572-199-11	SWITCH, KEY BOARD (2 (DISC))			
S824	1-572-199-11	SWITCH, KEY BOARD (1 (DISC))			
S826	1-572-199-11	SWITCH, KEY BOARD (ENTER/MEM)			
S827	1-572-199-11	SWITCH, KEY BOARD (DISC SCAN)			
S828	1-572-199-11	SWITCH, KEY BOARD (DISPLAY)			
S829	1-572-199-11	SWITCH, KEY BOARD (DISC MODE)			
S830	1-572-199-11	SWITCH, KEY BOARD (PLAY MODE (MONO/ST))			
S834	1-572-199-11	SWITCH, KEY BOARD (CANCEL)			
S835	1-572-199-11	SWITCH, KEY BOARD (EDIT)			
S836	1-572-199-11	SWITCH, KEY BOARD (FUNCTION)			
S839	1-572-199-11	SWITCH, KEY BOARD (- (TUNING/TIME SET))			
S840	1-572-199-11	SWITCH, KEY BOARD (+ (TUNING/TIME SET))			
		< VIBRATOR >			
X801	1-579-901-11	OSCILLATOR, CERAMIC (4.19MHz)			
X802	1-760-105-11	VIBRATOR, CRYSTAL (32.768MHz)			
**********					
*	1-655-627-11	DISC BOARD			
		**********			
		< PHOTO REFLECTOR >			
PH661	8-749-924-30	PHOTO REFLECTOR GP2S28			
		< RESISTOR >			
R661	1-249-433-11	CARBON	22K	5% 1/4W	
R662	1-249-409-11	CARBON	220	5% 1/4W	
**********					

Ref.No.	Part No.	Description			Remark
*	1-655-626-11	FLOOR BOARD			
		**********			
		< PHOTO INTERRUPTER >			
PH663	8-719-052-69	PHOTO INTERRUPTER RPI-352			
		< RESISTOR >			
R663	1-249-435-11	CARBON	33K	5% 1/4W	
R664	1-249-407-11	CARBON	150	5% 1/4W	
R665	1-249-429-11	CARBON	10K	5% 1/4W	
		< SWITCH >			
S663	1-762-010-11	SWITCH, LEVER (CHUCKING)			
**********					
*	1-655-652-11	H/P BOARD			
		*********			
		< CAPACITOR >			
C147	1-104-664-11	ELECT	47uF	20% 10V	
C247	1-104-664-11	ELECT	47uF	20% 10V	
		< JACK >			
J301	1-568-267-11	JACK (PHONES)			
		< RESISTOR >			
R140	1-216-033-00	METAL CHIP	220	5% 1/10W	
R240	1-216-033-00	METAL CHIP	220	5% 1/10W	
**********					
*	1-655-655-11	LAMP BOARD			
		**********			
		< CONNECTOR >			
* CN801	1-506-984-11	PIN, CONNECTOR (PC BOARD) 2P			
		< PILOT LAMP >			
PL801-804					
	1-517-433-11	LAMP, PILOT			
**********					
*	A-3305-096-A	MAIN BOARD, COMPLETE			
		**********			
	3-325-679-71	SCREW, TAPPING +BV 3X12			
		< CAPACITOR >			
C101	1-163-009-11	CERAMIC CHIP	0.001uF	10% 50V	
C102	1-163-006-11	CERAMIC CHIP	560PF	10% 50V	

MAIN

Ref. No.	Part No.	Description		Remark	
C103	1-163-006-11	CERAMIC CHIP	560PF	10%	50V
C104	1-163-022-00	CERAMIC CHIP	0.012uF	10%	50V
C105	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C106	1-163-014-00	CERAMIC CHIP	0.0027uF	10%	50V
C107	1-126-963-11	ELECT	4.7uF	20%	50V
C109	1-126-162-11	ELECT	3.3uF	20%	50V
C112	1-161-041-00	CERAMIC	0.0015uF	10%	50V
C113	1-124-902-00	ELECT	0.47uF	20%	50V
C114	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C115	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C120	1-161-024-00	CERAMIC	0.082uF	10%	25V
C121	1-161-024-00	CERAMIC	0.082uF	10%	25V
C123	1-124-464-11	ELECT	0.22uF	20%	50V
C126	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C130	1-161-772-11	CERAMIC	0.1uF	10%	25V
C131	1-161-046-11	CERAMIC	0.0039uF	10%	50V
C132	1-161-054-00	CERAMIC	0.018uF	10%	25V
C133	1-161-055-00	CERAMIC	0.022uF	10%	50V
C134	1-161-024-00	CERAMIC	0.082uF	10%	25V
C135	1-161-024-00	CERAMIC	0.082uF	10%	25V
C136	1-104-664-11	ELECT	47uF	20%	10V
C137	1-126-963-11	ELECT	4.7uF	20%	50V
C139	1-124-443-00	ELECT	100uF	20%	10V
C140	1-136-165-00	FILM	0.1uF	5%	50V
C141	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C142	1-130-493-00	MYLAR	0.068uF	5%	50V
C143	1-130-493-00	MYLAR	0.068uF	5%	50V
C144	1-124-443-00	ELECT	100uF	20%	10V
C145	1-124-443-00	ELECT	100uF	20%	10V
C148	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C149	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C151	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C198	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C199	1-124-907-11	ELECT	10uF	20%	50V
C201	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C202	1-163-006-11	CERAMIC CHIP	560PF	10%	50V
C203	1-163-006-11	CERAMIC CHIP	560PF	10%	50V
C204	1-163-022-00	CERAMIC CHIP	0.012uF	10%	50V
C205	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C206	1-163-014-00	CERAMIC CHIP	0.0027uF	10%	50V
C207	1-126-963-11	ELECT	4.7uF	20%	50V
C209	1-126-162-11	ELECT	3.3uF	20%	50V
C212	1-161-041-00	CERAMIC	0.0015uF	10%	50V
C213	1-124-902-00	ELECT	0.47uF	20%	50V
C214	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C215	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C220	1-161-024-00	CERAMIC	0.082uF	10%	25V
C221	1-161-024-00	CERAMIC	0.082uF	10%	25V
C223	1-124-464-11	ELECT	0.22uF	20%	50V

Ref. No.	Part No.	Description		Remark	
C226	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C230	1-161-772-11	CERAMIC	0.1uF	10%	25V
C231	1-161-046-11	CERAMIC	0.0039uF	10%	50V
C232	1-161-054-00	CERAMIC	0.018uF	10%	25V
C233	1-161-055-00	CERAMIC	0.022uF	10%	50V
C234	1-161-024-00	CERAMIC	0.082uF	10%	25V
C235	1-161-024-00	CERAMIC	0.082uF	10%	25V
C236	1-104-664-11	ELECT	47uF	20%	10V
C237	1-126-963-11	ELECT	4.7uF	20%	50V
C239	1-124-443-00	ELECT	100uF	20%	10V
C240	1-136-165-00	FILM	0.1uF	5%	50V
C241	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C242	1-130-493-00	MYLAR	0.068uF	5%	50V
C243	1-130-493-00	MYLAR	0.068uF	5%	50V
C244	1-124-443-00	ELECT	100uF	20%	10V
C245	1-124-443-00	ELECT	100uF	20%	10V
C248	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C249	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C251	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C252	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C298	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C299	1-124-907-11	ELECT	10uF	20%	50V
C303	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C304	1-130-481-00	MYLAR	0.0068uF	5%	50V
C305	1-130-483-00	MYLAR	0.01uF	5%	50V
C307	1-130-479-00	MYLAR	0.0047uF	5%	50V
C308	1-130-471-00	MYLAR	0.001uF	5%	50V
C309	1-130-482-00	MYLAR	0.0082uF	5%	50V
C310	1-130-467-00	MYLAR	470PF	5%	50V
C311	1-130-476-00	MYLAR	0.0027uF	5%	50V
C312	1-130-472-00	MYLAR	0.0012uF	5%	50V
C313-316					
	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C321	1-124-916-11	ELECT	22uF	20%	63V
C322-324					
	1-124-907-11	ELECT	10uF	20%	50V
C325	1-124-902-00	ELECT	0.47uF	20%	50V
C326	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C327	1-124-907-11	ELECT	10uF	20%	50V
C328	1-104-664-11	ELECT	47uF	20%	10V
C329	1-124-916-11	ELECT	22uF	20%	63V
C330	1-124-903-11	ELECT	1uF	20%	50V
C331	1-124-443-00	ELECT	100uF	20%	10V
C332	1-104-666-11	ELECT	220uF	20%	10V
C333	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C338	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C339	1-104-664-11	ELECT	47uF	20%	10V
C347	1-124-120-11	ELECT	220uF	20%	25V
C350	1-124-443-00	ELECT	100uF	20%	10V

Ref. No.	Part No.	Description			Remark
C351	1-104-664-11	ELECT	47uF	20%	16V
C354	1-124-907-11	ELECT	10uF	20%	50V
C355	1-104-664-11	ELECT	47uF	20%	16V
C357	1-124-443-00	ELECT	100uF	20%	10V
C358	1-124-902-00	ELECT	0.47uF	20%	50V
C359	1-126-233-11	ELECT	22uF	20%	50V
C360	1-124-443-00	ELECT	100uF	20%	10V
C361	1-124-480-11	ELECT	470uF	20%	25V
C362	1-104-664-11	ELECT	47uF	20%	16V
C365	1-124-907-11	ELECT	10uF	20%	50V
C366	1-124-907-11	ELECT	10uF	20%	50V
C368-371	1-124-907-11	ELECT	10uF	20%	50V
C372	1-124-443-00	ELECT	100uF	20%	10V
C373	1-124-443-00	ELECT	100uF	20%	10V
C375	1-124-443-00	ELECT	100uF	20%	10V
C377	1-104-664-11	ELECT	47uF	20%	10V
C378	1-124-907-11	ELECT	10uF	20%	50V
C379	1-124-907-11	ELECT	10uF	20%	50V
C381	1-124-916-11	ELECT	22uF	20%	63V
C386	1-104-663-11	ELECT	33uF	20%	16V
C388	1-126-963-11	ELECT	4.7uF	20%	50V
C389	1-124-907-11	ELECT	10uF	20%	50V
C395	1-124-443-00	ELECT	100uF	20%	10V
C399	1-124-907-11	ELECT	10uF	20%	50V

< CONNECTOR >

* CN301	1-506-990-11	PIN, CONNECTOR (PC BOARD)	8P
* CN302	1-506-986-11	PIN, CONNECTOR (PC BOARD)	4P
CN303	1-691-057-21	HOUSING, CONNECTOR	25P
CN304	1-691-047-21	HOUSING, CONNECTOR	15P
CN305	1-691-047-21	HOUSING, CONNECTOR	15P
CN306	1-691-057-21	HOUSING, CONNECTOR	25P
* CN307	1-506-474-11	PIN, CONNECTOR (PC BOARD)	9P
* CN308	1-565-731-11	PLUG, CONNECTOR (2.5MM)	5P
* CN310	1-565-731-11	PLUG, CONNECTOR (2.5MM)	5P

< DIODE >

D301	8-719-157-42	DIODE	RD8.2M-B
D307	8-719-914-43	DIODE	DAN202K
D308	8-719-914-43	DIODE	DAN202K
D309	8-719-914-43	DIODE	DAN202K
D310	8-719-914-43	DIODE	DAN202K
D311	8-719-914-43	DIODE	DAN202K
D312	8-719-914-43	DIODE	DAN202K
D314	8-719-914-43	DIODE	DAN202K
D315	8-719-914-43	DIODE	DAN202K
D316	8-719-914-43	DIODE	DAN202K
D320	8-719-914-43	DIODE	DAN202K
D323	8-719-914-43	DIODE	DAN202K
D324	8-719-914-43	DIODE	DAN202K
D330	8-719-030-26	DIODE	ST04-27F1
D331	8-719-914-43	DIODE	DAN202K
D333	8-719-914-43	DIODE	DAN202K
D334	8-719-914-43	DIODE	DAN202K
D335	8-719-914-43	DIODE	DAN202K
D336	8-719-914-43	DIODE	DAN202K
D337	8-719-914-43	DIODE	DAN202K
D350	8-719-914-43	DIODE	DAN202K
D351	8-719-914-43	DIODE	DAN202K

< IC >

IC302	8-759-048-59	IC	BA3423S
IC303	8-759-932-33	IC	BU4066B
IC304	1-807-547-11	IC	KA4558-C
IC305	1-807-547-11	IC	KA4558-C
IC306	8-759-325-94	IC	TDA7319
IC307	8-759-822-51	IC	LA4620
IC308	8-759-080-77	IC	BA3933
IC309	8-759-095-60	IC	S-81250PG
IC310	8-759-095-60	IC	S-81250PG

< JACK >

J302	1-537-114-11	TERMINAL BOARD (SPEAKER OUTPUT)
J303	1-750-184-11	JACK, MICROPHONE (MIX MIC)

< COIL >

L301	1-410-393-11	INDUCTOR CHIP	100uH

< TRANSISTOR >

Q101	8-729-119-78	TRANSISTOR	2SC2785-HFE
Q102	8-729-119-78	TRANSISTOR	2SC2785-HFE
Q103	8-729-900-52	TRANSISTOR	DTC114YK
Q104	8-729-900-52	TRANSISTOR	DTC114YK
Q106	8-729-905-50	TRANSISTOR	DTC343TS
Q201	8-729-119-78	TRANSISTOR	2SC2785-HFE
Q202	8-729-119-78	TRANSISTOR	2SC2785-HFE
Q203	8-729-900-52	TRANSISTOR	DTC114YK
Q204	8-729-900-52	TRANSISTOR	DTC114YK
Q205	8-729-900-52	TRANSISTOR	DTC114YK
Q206	8-729-905-50	TRANSISTOR	DTC343TS
Q303	8-729-901-46	TRANSISTOR	DTA114YK
Q304	8-729-900-52	TRANSISTOR	DTC114YK
Q305	8-729-142-46	TRANSISTOR	2SC2001-LK
Q307	8-729-901-46	TRANSISTOR	DTA114YK
Q308	8-729-601-58	TRANSISTOR	2SC3053-C
Q310	8-729-900-52	TRANSISTOR	DTC114YK

MAIN

Ref. No.	Part No.	Description				Remark
Q311	8-729-901-46	TRANSISTOR	DTA114YK			
Q312	8-729-801-84	TRANSISTOR	2SB1013-4			
Q313	8-729-900-52	TRANSISTOR	DTC114YK			
Q314	8-729-801-84	TRANSISTOR	2SB1013-4			
Q315	8-729-119-78	TRANSISTOR	2SC2785-HFE			
Q316	8-729-900-53	TRANSISTOR	DTC114EK			
Q317	8-729-119-78	TRANSISTOR	2SC2785-HFE			
Q318	8-729-900-52	TRANSISTOR	DTC114YK			
Q319	8-729-142-46	TRANSISTOR	2SC2001-LK			
Q320	8-729-900-52	TRANSISTOR	DTC114YK			
Q321	8-729-115-30	TRANSISTOR	2SK105A-30			
Q322	8-729-900-52	TRANSISTOR	DTC114YK			
Q323	8-729-601-58	TRANSISTOR	2SC3053-C			
Q324	8-729-216-22	TRANSISTOR	2SA1162-G			
Q325	8-729-216-22	TRANSISTOR	2SA1162-G			
Q326	8-729-601-58	TRANSISTOR	2SC3053-C			
Q327	8-729-900-52	TRANSISTOR	DTC114YK			
Q328	8-729-142-46	TRANSISTOR	2SC2001-LK			
Q331	8-729-900-52	TRANSISTOR	DTC114YK			
Q332	8-729-900-52	TRANSISTOR	DTC114YK			
Q337	8-729-901-46	TRANSISTOR	DTA114YK			
Q338	8-729-900-52	TRANSISTOR	DTC114YK			
Q339	8-729-900-52	TRANSISTOR	DTC114YK			
Q341	8-729-142-46	TRANSISTOR	2SC2001-LK			
Q342	8-729-142-46	TRANSISTOR	2SC2001-LK			
Q343	8-729-142-46	TRANSISTOR	2SC2001-LK			
Q344	8-729-142-46	TRANSISTOR	2SC2001-LK			
Q346	8-729-801-84	TRANSISTOR	2SB1013-4			
Q379	8-729-900-52	TRANSISTOR	DTC114YK			
Q380	8-729-900-52	TRANSISTOR	DTC114YK			
		< RESISTOR >				
R101	1-216-049-11	METAL GLAZE	1K	5%	1/10W	
R102	1-216-049-11	METAL GLAZE	1K	5%	1/10W	
R103	1-216-071-00	METAL CHIP	8.2K	5%	1/10W	
R104	1-216-107-00	METAL CHIP	270K	5%	1/10W	
R105	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
R106	1-216-027-00	METAL CHIP	120	5%	1/10W	
R107	1-216-071-00	METAL CHIP	8.2K	5%	1/10W	
R108	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R110	1-216-077-00	METAL CHIP	15K	5%	1/10W	
R111	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	
R112	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R113	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
R114	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R115	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R120	1-216-055-00	METAL CHIP	1.8K	5%	1/10W	
R121	1-216-085-00	METAL CHIP	33K	5%	1/10W	
R124	1-216-113-00	METAL CHIP	470K	5%	1/10W	

Ref. No.	Part No.	Description				Remark
R126	1-216-071-00	METAL CHIP	8.2K	5%	1/10W	
R127	1-216-049-11	METAL GLAZE	1K	5%	1/10W	
R129	1-216-114-00	METAL GLAZE	510K	5%	1/10W	
R130	1-216-059-00	METAL CHIP	2.7K	5%	1/10W	
R131	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R132	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
R133	1-216-049-11	METAL GLAZE	1K	5%	1/10W	
R134	1-216-298-00	METAL CHIP	2.2	5%	1/10W	
R135	1-216-298-00	METAL CHIP	2.2	5%	1/10W	
R136	1-216-049-11	METAL GLAZE	1K	5%	1/10W	
R141	1-216-071-00	METAL CHIP	8.2K	5%	1/10W	
R201	1-216-049-11	METAL GLAZE	1K	5%	1/10W	
R202	1-216-049-11	METAL GLAZE	1K	5%	1/10W	
R203	1-216-071-00	METAL CHIP	8.2K	5%	1/10W	
R204	1-216-107-00	METAL CHIP	270K	5%	1/10W	
R205	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
R206	1-216-027-00	METAL CHIP	120	5%	1/10W	
R207	1-216-071-00	METAL CHIP	8.2K	5%	1/10W	
R208	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R210	1-216-077-00	METAL CHIP	15K	5%	1/10W	
R211	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	
R212	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R213	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
R214	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R215	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R220	1-216-055-00	METAL CHIP	1.8K	5%	1/10W	
R221	1-216-085-00	METAL CHIP	33K	5%	1/10W	
R224	1-216-113-00	METAL CHIP	470K	5%	1/10W	
R226	1-216-071-00	METAL CHIP	8.2K	5%	1/10W	
R227	1-216-049-11	METAL GLAZE	1K	5%	1/10W	
R229	1-216-114-00	METAL GLAZE	510K	5%	1/10W	
R230	1-216-059-00	METAL CHIP	2.7K	5%	1/10W	
R231	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R232	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
R233	1-216-049-11	METAL GLAZE	1K	5%	1/10W	
R234	1-216-298-00	METAL CHIP	2.2	5%	1/10W	
R235	1-216-298-00	METAL CHIP	2.2	5%	1/10W	
R236	1-216-049-11	METAL GLAZE	1K	5%	1/10W	
R241	1-216-071-00	METAL CHIP	8.2K	5%	1/10W	
R301	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R302	1-216-001-00	METAL CHIP	10	5%	1/10W	
R303	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
R304	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R305	1-216-017-00	METAL GLAZE	47	5%	1/10W	
R306	1-216-001-00	METAL CHIP	10	5%	1/10W	
R310	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	
R311	1-216-049-11	METAL GLAZE	1K	5%	1/10W	
R312-314	1-216-073-00	METAL CHIP	10K	5%	1/10W	

Ref. No.	Part No.	Description			Remark
R315	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R316	1-216-073-00	METAL CHIP	10K	5%	1/10W
R317	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R318	1-216-073-00	METAL CHIP	10K	5%	1/10W
R319	1-216-085-00	METAL CHIP	33K	5%	1/10W
R320	1-216-063-00	METAL GLAZE	3.9K	5%	1/10W
R321	1-216-079-00	METAL CHIP	18K	5%	1/10W
R322	1-216-121-00	METAL GLAZE	1M	5%	1/10W
R323	1-216-025-00	METAL GLAZE	100	5%	1/10W
R324	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R325	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R330	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R331	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R332	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R335	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R336	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R337	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R338	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R341	1-216-073-00	METAL CHIP	10K	5%	1/10W
R342	1-216-073-00	METAL CHIP	10K	5%	1/10W
R344	1-216-025-00	METAL GLAZE	100	5%	1/10W
R349	1-216-025-00	METAL GLAZE	100	5%	1/10W
R351	1-216-073-00	METAL CHIP	10K	5%	1/10W
R352	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R353	1-216-121-00	METAL GLAZE	1M	5%	1/10W
R354	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R355	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R356	1-216-073-00	METAL CHIP	10K	5%	1/10W
R360	1-216-073-00	METAL CHIP	10K	5%	1/10W
R362	1-216-073-00	METAL CHIP	10K	5%	1/10W
R363	1-216-041-00	METAL CHIP	470	5%	1/10W
R364	1-216-081-00	METAL CHIP	22K	5%	1/10W
R365	1-216-073-00	METAL CHIP	10K	5%	1/10W
R366	1-216-073-00	METAL CHIP	10K	5%	1/10W
R367	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R368	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R369	1-216-073-00	METAL CHIP	10K	5%	1/10W
R370	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R371	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R373	1-216-073-00	METAL CHIP	10K	5%	1/10W
R374	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R375	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R376	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R377	1-216-115-00	METAL CHIP	560K	5%	1/10W
R378	1-216-115-00	METAL CHIP	560K	5%	1/10W
R379	1-216-113-00	METAL CHIP	470K	5%	1/10W
R380	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R381	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R383	1-216-113-00	METAL CHIP	470K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R384	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R385	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R386	1-216-073-00	METAL CHIP	10K	5%	1/10W
R391	1-216-073-00	METAL CHIP	10K	5%	1/10W
R392	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R393	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R395	1-216-041-00	METAL CHIP	470	5%	1/10W
R396	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R397	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R398	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R399	1-216-049-11	METAL GLAZE	1K	5%	1/10W

< SWITCH >

S301 1-571-307-11 SWITCH, SLIDE (ISS)

< TRANSFORMER >

T301 1-433-372-11 TRANSFORMER, BIAS OSCILLATION

****

* 1-655-625-11 MODE BOARD

****

< SWITCH >

S666 1-762-010-11 SWITCH, LEVER (MODE 1)
S667 1-762-010-11 SWITCH, LEVER (MODE 2)
S668 1-762-287-11 SWITCH, PUSH LEVER (STOCK)
S669 1-762-287-11 SWITCH, PUSH LEVER (MODE 3)

****

* 1-655-656-11 POWER BOARD

****

1-533-233-11 HOLDER, FUSE
7-685-646-79 SCREW, TAPPING +BV 3X8

< CAPACITOR >

C901-904 1-101-005-00 CERAMIC 22000PF 50V
C905 1-124-771-00 ELECT 6800uF 20% 25V
C906 1-136-169-00 FILM 0.22uF 5% 50V

< CONNECTOR >

* CN902 1-506-984-11 PIN, CONNECTOR (PC BOARD) 2P

< DIODE >

D901 8-719-510-68 DIODE D5SBA20F01

< FUSE >

⚠F901 1-533-265-11 FUSE, GLASS TUBE (8A/125V)

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

POWER **SW** **TC**

Ref. No.	Part No.	Description			Remark
		< AC INLET >			
⚠J901	1-540-009-11	INLET, AC (~ AC IN)			
		< LINE FILTER >			
⚠LF901	1-424-150-11	TRANSFORMER, LINE FILTER			
**********					
*	1-655-654-11	SW BOARD			
		********			
		< IC >			
IC804	8-741-810-59	ELEMENT, RAY-CATCHER SBX1810-59			
		< RESISTOR >			
R801	1-216-079-00	METAL CHIP	18K	5%	1/10W
R802	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R803	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R804	1-216-055-00	METAL CHIP	1.8K	5%	1/10W
R805	1-216-051-00	METAL CHIP	1.2K	5%	1/10W
R806	1-216-047-00	METAL GLAZE	820	5%	1/10W
R807	1-216-045-00	METAL CHIP	680	5%	1/10W
R814	1-216-047-00	METAL GLAZE	820	5%	1/10W
R815	1-216-045-00	METAL CHIP	680	5%	1/10W
R830	1-216-047-00	METAL GLAZE	820	5%	1/10W
R831	1-216-045-00	METAL CHIP	680	5%	1/10W
R833	1-216-079-00	METAL CHIP	18K	5%	1/10W
R837	1-216-051-00	METAL CHIP	1.2K	5%	1/10W
R838	1-216-047-00	METAL GLAZE	820	5%	1/10W
		< SWITCH >			
S802	1-572-199-11	SWITCH, KEY BOARD (MEGA BASS)			
S803	1-572-199-11	SWITCH, KEY BOARD (SOUND)			
S804	1-572-199-11	SWITCH, KEY BOARD (BAND (RADIO))			
S805	1-572-199-11	SWITCH, KEY BOARD (CLOCK/TIMER)			
S806	1-572-199-11	SWITCH, KEY BOARD (STANDBY)			
S807	1-572-199-11	SWITCH, KEY BOARD (SLEEP)			
S815	1-572-199-11	SWITCH, KEY BOARD (▷▯▯ (CD))			
S816	1-572-199-11	SWITCH, KEY BOARD (□ (CD))			
S831	1-572-199-11	SWITCH, KEY BOARD (▷▷▯ (AMS/SEARCH))			
S832	1-572-199-11	SWITCH, KEY BOARD (▯◁◁ (AMS/SEARCH))			
S833	1-572-199-11	SWITCH, KEY BOARD (SURROUND)			
S837	1-572-199-11	SWITCH, KEY BOARD (- (PRESET))			
S838	1-572-199-11	SWITCH, KEY BOARD (+ (PRESET))			
**********					

Ref. No.	Part No.	Description			Remark
*	A-3305-088-A	TC BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C601	1-124-916-11	ELECT	22uF	20%	63V
C602	1-126-233-11	ELECT	22uF	20%	50V
C603	1-124-907-11	ELECT	10uF	20%	50V
C611	1-161-494-00	CERAMIC	0.022uF		25V
C612	1-161-494-00	CERAMIC	0.022uF		25V
		< CONNECTOR >			
* CN602	1-566-001-11	PIN, CONNECTOR (PC BOARD) 4P			
		< DIODE >			
D604	8-719-991-33	DIODE 1SS133T-77			
		< TRANSISTOR >			
Q601	8-729-801-84	TRANSISTOR 2SB1013-4			
Q602	8-729-904-36	TRANSISTOR DTC114YS			
Q603	8-729-902-80	TRANSISTOR DTA114YS			
Q604	8-729-904-36	TRANSISTOR DTC114YS			
Q606	8-729-904-36	TRANSISTOR DTC114YS			
Q607	8-729-904-36	TRANSISTOR DTC114YS			
Q608	8-729-115-30	TRANSISTOR 2SK105A-30			
Q609	8-729-904-36	TRANSISTOR DTC114YS			
Q610	8-729-904-36	TRANSISTOR DTC114YS			
Q611	8-729-904-36	TRANSISTOR DTC114YS			
		< RESISTOR >			
R601	1-249-441-11	CARBON	100K	5%	1/4W
R602	1-249-419-11	CARBON	1.5K	5%	1/4W
R604	1-249-425-11	CARBON	4.7K	5%	1/4W
R606	1-249-441-11	CARBON	100K	5%	1/4W
R607	1-249-424-11	CARBON	3.9K	5%	1/4W
R608	1-249-425-11	CARBON	4.7K	5%	1/4W
		< VARIABLE RESISTOR >			
RV601	1-230-495-11	RES, ADJ, CARBON 2.2K			
		< SWITCH >			
S601	1-571-890-11	SWITCH, LEAF (HIGH SPEED DUBBING (DECK A))			
S602	1-571-890-11	SWITCH, LEAF (MOTOR (DECK A))			
S603	1-571-890-11	SWITCH, LEAF (PLAY (DECK A))			
S604	1-571-890-11	SWITCH, LEAF (MOTOR (DECK B))			
S605	1-571-890-11	SWITCH, LEAF (REC (DECK B))			
S606	1-571-890-11	SWITCH, LEAF (PLAY (DECK B))			
**********					

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Ref. No.	Part No.	Description			Remark
*	A-3305-094-A	TUNER BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C2	1-162-294-31	CERAMIC	0.001uF	10%	50V
C3	1-162-306-11	CERAMIC	0.01uF	30%	16V
C4	1-102-959-00	CERAMIC	22PF	5%	50V
C5	1-162-203-31	CERAMIC	15PF	5%	50V
C7	1-161-051-00	CERAMIC	0.01uF	10%	50V
C8	1-162-201-31	CERAMIC	12PF	5%	50V
C9	1-102-820-00	CERAMIC	330PF	5%	50V
C10	1-162-851-11	CERAMIC	0.1uF		16V
C11	1-164-079-11	CERAMIC	330PF	10%	50V
C12	1-124-907-11	ELECT	10uF	20%	50V
C13	1-162-306-11	CERAMIC	0.01uF	30%	16V
C14	1-161-061-11	CERAMIC	0.068uF	10%	50V
C15	1-161-024-00	CERAMIC	0.082uF	10%	25V
C16	1-161-024-00	CERAMIC	0.082uF	10%	25V
C17	1-126-963-11	ELECT	4.7uF	20%	50V
C18	1-104-664-11	ELECT	47uF	20%	10V
C19	1-162-306-11	CERAMIC	0.01uF	30%	16V
C22	1-162-306-11	CERAMIC	0.01uF	30%	16V
C23	1-161-055-00	CERAMIC	0.022uF	10%	50V
C24	1-161-055-00	CERAMIC	0.022uF	10%	50V
C26	1-126-963-11	ELECT	4.7uF	20%	50V
C27	1-126-963-11	ELECT	4.7uF	20%	50V
C44	1-161-051-00	CERAMIC	0.01uF	10%	50V
C45	1-136-177-00	FILM	1uF	5%	50V
C46	1-126-963-11	ELECT	4.7uF	20%	50V
C47	1-162-306-11	CERAMIC	0.01uF	30%	16V
C48	1-126-963-11	ELECT	4.7uF	20%	50V
C49	1-162-306-11	CERAMIC	0.01uF	30%	16V
C50	1-162-294-31	CERAMIC	0.001uF	10%	50V
C51	1-162-294-31	CERAMIC	0.001uF	10%	50V
C53	1-162-294-31	CERAMIC	0.001uF	10%	50V
C54	1-102-518-11	CERAMIC	33PF	5%	50V
C55	1-162-199-31	CERAMIC	10PF	5%	50V
C56	1-162-290-31	CERAMIC	470PF	10%	50V
C57	1-162-290-31	CERAMIC	470PF	10%	50V
C58	1-162-306-11	CERAMIC	0.01uF	30%	16V
C59	1-162-306-11	CERAMIC	0.01uF	30%	16V
C62	1-162-306-11	CERAMIC	0.01uF	30%	16V
C63	1-162-851-11	CERAMIC	0.1uF		16V
C64	1-162-198-31	CERAMIC	8.2PF	10%	50V
C65	1-162-282-31	CERAMIC	100PF	10%	50V
C66	1-161-051-00	CERAMIC	0.01uF	10%	50V
C67	1-162-306-11	CERAMIC	0.01uF	30%	16V
C68	1-162-215-31	CERAMIC	47PF	5%	50V
C69	1-161-051-00	CERAMIC	0.01uF	10%	50V
C70	1-161-051-00	CERAMIC	0.01uF	10%	50V
C71	1-162-294-31	CERAMIC	0.001uF	10%	50V
C76	1-162-294-31	CERAMIC	0.001uF	10%	50V
C85	1-162-294-31	CERAMIC	0.001uF	10%	50V
C86	1-162-294-31	CERAMIC	0.001uF	10%	50V
C87	1-162-282-31	CERAMIC	100PF	10%	50V
C88	1-162-282-31	CERAMIC	100PF	10%	50V
C89	1-162-294-31	CERAMIC	0.001uF	10%	50V
C91	1-162-282-31	CERAMIC	100PF	10%	50V
C92	1-162-282-31	CERAMIC	100PF	10%	50V
C93	1-162-294-31	CERAMIC	0.001uF	10%	50V
C94	1-162-282-31	CERAMIC	100PF	10%	50V
C95	1-162-282-31	CERAMIC	100PF	10%	50V
		< FILTER >			
CF1-3	1-760-127-11	FILTER, CERAMIC			
CF4	1-579-762-11	VIBRATOR, CERAMIC			
		< ENCAPSULATED COMPONENT >			
CFT1	1-239-173-11	ENCAPSULATED COMPONENT			
		< CONNECTOR >			
CN1	1-691-074-11	CONNECTOR, FLEXIBLE 15P			
		< TRIMMER >			
CT1	1-141-411-11	CAP, ADJ 20PF			
CT2	1-141-411-11	CAP, ADJ 20PF			
		< DIODE >			
D1	8-719-050-72	DIODE	KV1370NT		
D2	8-719-050-72	DIODE	KV1370NT		
D3	8-719-050-70	DIODE	KV1520NT		
D5	8-719-986-73	DIODE	RB441Q		
D6	8-719-991-33	DIODE	1SS133T-77		
D7	8-719-991-33	DIODE	1SS133T-77		
		< FILTER >			
FL1	1-236-711-21	FILTER, BAND PASS			
		< IC >			
IC1	8-759-188-84	IC	TA2008N		
IC3	8-759-333-33	IC	BU2614		
		< COIL >			
L1	1-409-905-11	COIL, FM RF			
L2	1-409-904-11	COIL, FM OSC			

TUNER

Ref. No.	Part No.	Description			Remark
L4	1-411-234-11	COIL, AM OSC			
L5	1-410-336-11	INDUCTOR	220uH		
L7	1-410-521-11	INDUCTOR	100uH		
		< TRANSISTOR >			
Q1	8-729-904-36	TRANSISTOR	DTC114YS		
Q2	8-729-904-36	TRANSISTOR	DTC114YS		
Q3	8-729-904-36	TRANSISTOR	DTC114YS		
Q4	8-729-904-36	TRANSISTOR	DTC114YS		
Q15	8-729-900-61	TRANSISTOR	DTA114ES		
Q16	8-729-012-83	TRANSISTOR	2SK679A		
Q17	8-729-106-07	TRANSISTOR	2SK514-H		
Q18	8-729-922-66	TRANSISTOR	2SC2410SN		
		< RESISTOR >			
R1	1-249-441-11	CARBON	100K	5%	1/4W
R2	1-247-887-00	CARBON	220K	5%	1/4W
R3	1-249-431-11	CARBON	15K	5%	1/4W
R4	1-249-429-11	CARBON	10K	5%	1/4W
R6	1-247-887-00	CARBON	220K	5%	1/4W
R7	1-249-411-11	CARBON	330	5%	1/4W
R8	1-249-433-11	CARBON	22K	5%	1/4W
R9	1-249-421-11	CARBON	2.2K	5%	1/4W
R10	1-249-425-11	CARBON	4.7K	5%	1/4W
R11	1-249-409-11	CARBON	220	5%	1/4W
R14	1-249-404-00	CARBON	82	5%	1/4W
R16	1-249-425-11	CARBON	4.7K	5%	1/4W
R17	1-249-425-11	CARBON	4.7K	5%	1/4W
R25	1-249-417-11	CARBON	1K	5%	1/4W
R26	1-249-425-11	CARBON	4.7K	5%	1/4W
R27	1-249-421-11	CARBON	2.2K	5%	1/4W
R28	1-249-429-11	CARBON	10K	5%	1/4W
R29	1-249-415-11	CARBON	680	5%	1/4W
R30	1-249-412-11	CARBON	390	5%	1/4W
R35	1-249-417-11	CARBON	1K	5%	1/4W
R37-39	1-249-429-11	CARBON	10K	5%	1/4W
R40	1-249-417-11	CARBON	1K	5%	1/4W
R41	1-249-417-11	CARBON	1K	5%	1/4W
R42	1-249-425-11	CARBON	4.7K	5%	1/4W
R43	1-249-437-11	CARBON	47K	5%	1/4W
R46	1-249-433-11	CARBON	22K	5%	1/4W
R55	1-249-421-11	CARBON	2.2K	5%	1/4W
R56	1-249-407-11	CARBON	150	5%	1/4W
R57	1-249-399-11	CARBON	33	5%	1/4W
R58	1-249-411-11	CARBON	330	5%	1/4W
R59	1-249-437-11	CARBON	47K	5%	1/4W
R60	1-249-425-11	CARBON	4.7K	5%	1/4W

Ref. No.	Part No.	Description	Remark
		< VIBRATOR >	
X1	1-760-130-11	VIBRATOR, CRYSTAL (7.5kHz)	
**********			
		MISCELLANEOUS	
		**********	
1	1-769-476-11	WIRE, PARALLEL (FFC) (15 CORE)	
63	1-769-475-11	WIRE, PARALLEL (FFC) (15 CORE)	
64	1-769-474-11	WIRE, PARALLEL (FFC) (25 CORE)	
84	1-769-473-11	WIRE, PARALLEL (FFC) (25 CORE)	
309	1-452-759-11	MAGNET	
⚠401	8-848-367-11	PICK-UP, OPTICAL KSS-213B/K-N	
457	1-559-620-11	CORD (WITH CONNECTOR)	
507	1-559-620-11	CORD (WITH CONNECTOR)	
ANT1	1-501-452-11	ANTENNA, TELESCOPIC	
⚠F901	1-533-265-11	FUSE, GLASS TUBE (8A/125V)	
HE601	1-543-535-11	HEAD, MAGNETIC (ERASE)	
HP601	1-543-628-11	HEAD, MAGNETIC (PLAYBACK)	
HRP601	1-543-628-11	HEAD, MAGNETIC (RECORD/PLAYBACK)	
M601	X-4920-924-1	MOTOR ASSY	
M651	X-3370-743-1	MOTOR ASSY (FLOOR UP/DOWN)	
M652	X-3370-743-1	MOTOR ASSY (TRAY LOAD)	
M701	X-2625-769-1	MOTOR GEAR ASSY (SLED)	
M702	X-2625-877-1	MOTOR ASSY, SPINDLE	
SP901	1-504-939-11	SPEAKER	
SP902	1-529-058-11	BUZZER	
SP903	1-504-939-11	SPEAKER	
SP904	1-529-058-11	BUZZER	
⚠T901	1-427-837-11	TRANSFORMER, POWER	
**********			
		ACCESSORIES & PACKING MATERIALS	
		**********	
	1-473-035-11	COMMANDER, STANDARD (RMT-C777)	
⚠	1-696-442-21	CORD, POWER (POLARIZED)	
	3-798-782-21	MANUAL, INSTRUCTION (ENGLISH)	
	3-798-782-31	MANUAL, INSTRUCTION (FRENCH) (Canadian)	
*	3-923-791-01	INDIVIDUAL CARTON (777)	
*	3-923-792-01	INDIVIDUAL CARTON (Canadian)	
*	3-923-796-01	CUSHION (TOP)	
*	3-923-797-01	CUSHION (BOTTOM)	
*	3-923-798-01	INDIVIDUAL CARTON (676:US)	
*	3-923-799-01	CUSHION (SP)	
	3-927-623-01	LID, REMOCON BATTERY (FOR RMT-C777)	
**********			

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
		**********	
		HARDWARE LIST	
		**********	
#1	7-685-649-79	SCREW +BVTP 3X14 TYPE2 IT-3	
#2	7-685-647-79	SCREW +BVTP 3X10 TYPE2 IT-3	
#3	7-682-548-04	SCREW +BVTT 3X8 (S)	
#4	7-682-549-04	SCREW +B 3X10	
#5	7-685-646-79	SCREW, TAPPING +BV 3X8	
#6	7-685-144-11	SCREW +P 3X5 TYPE2 NON-SLIT	
#7	7-685-132-19	SCREW +P 2.6X5 TYPE2 NON-SLIT	
#8	7-671-112-11	BALL, STEEL	
#9	7-621-255-45	SCREW +P 2X6	
#10	7-685-104-19	SCREW +P 2X6 TYPE2 NON-SLIT	
#11	7-624-102-04	STOP RING 1.5, TYPE -E	
#12	7-685-645-79	SCREW +BVTP 3X6 TYPE2 IT-3	
#13	7-621-775-08	SCREW +P 2.6X3	
#14	7-621-255-15	SCREW +P 2X3	

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Quality Engineering Dept.

CFD-676/777

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SERVICE MANUAL

US Model
CFD-676/777
Canadian Model
CFD-676

SUPPLEMENT-1

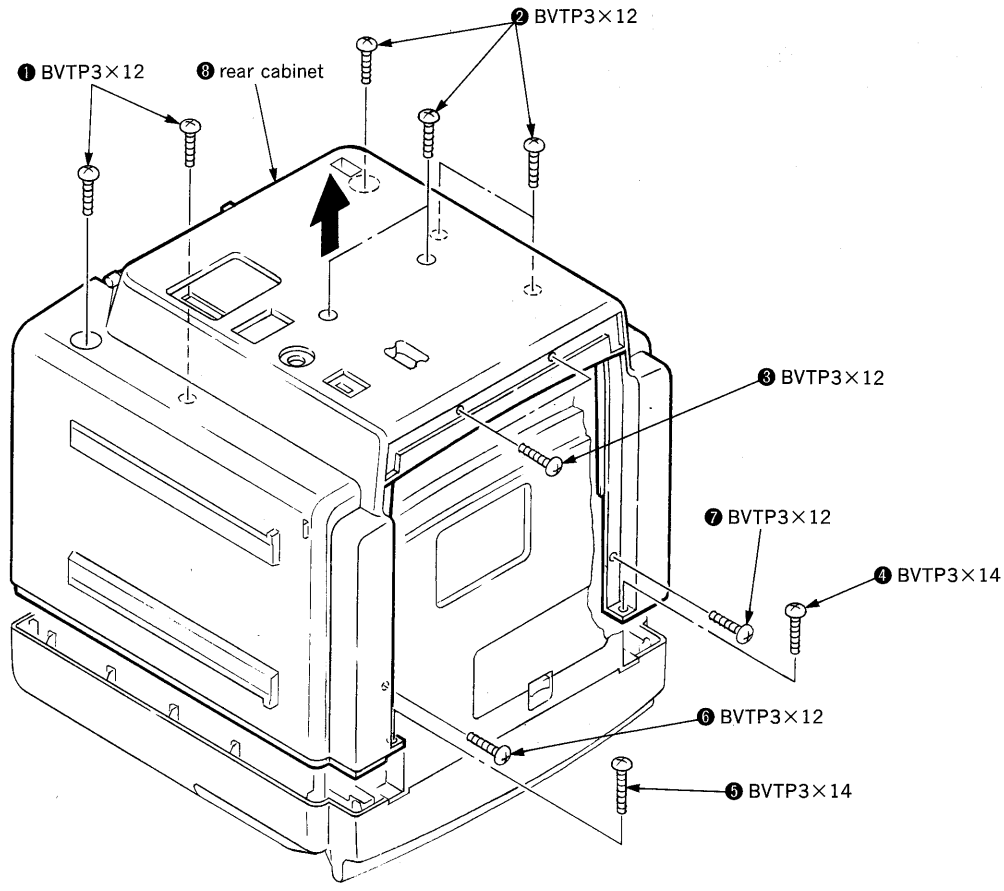
File this supplement with the service manual.

Subject : DISASSEMBLY

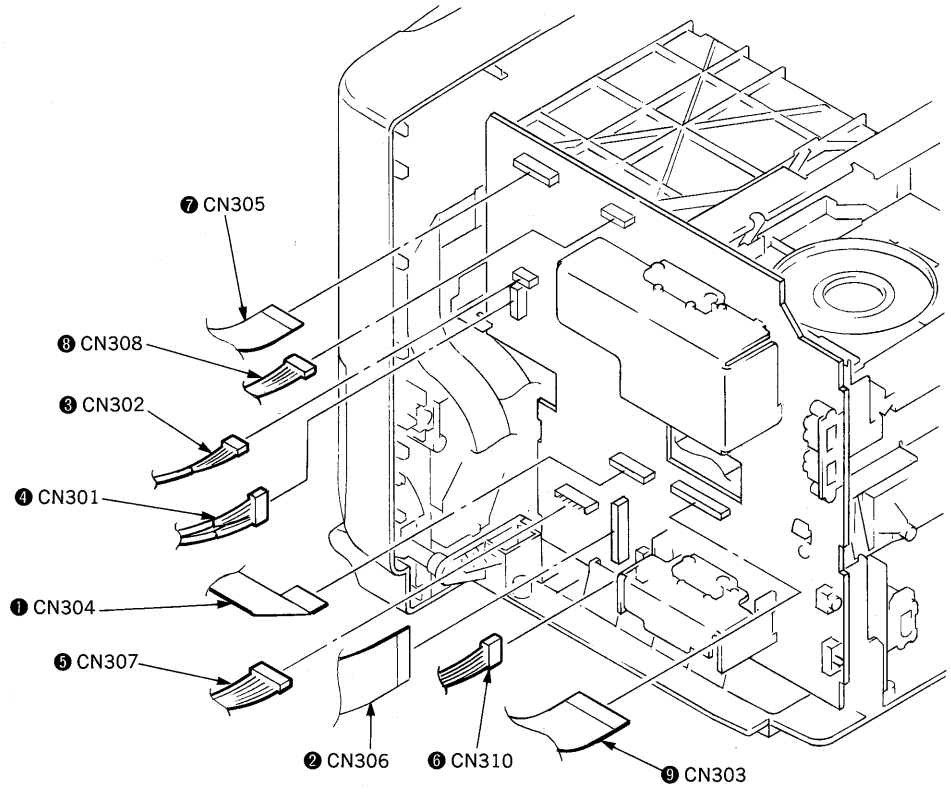
DISASSEMBLY

Note : Follow the disassembly procedure in the numerical order given.

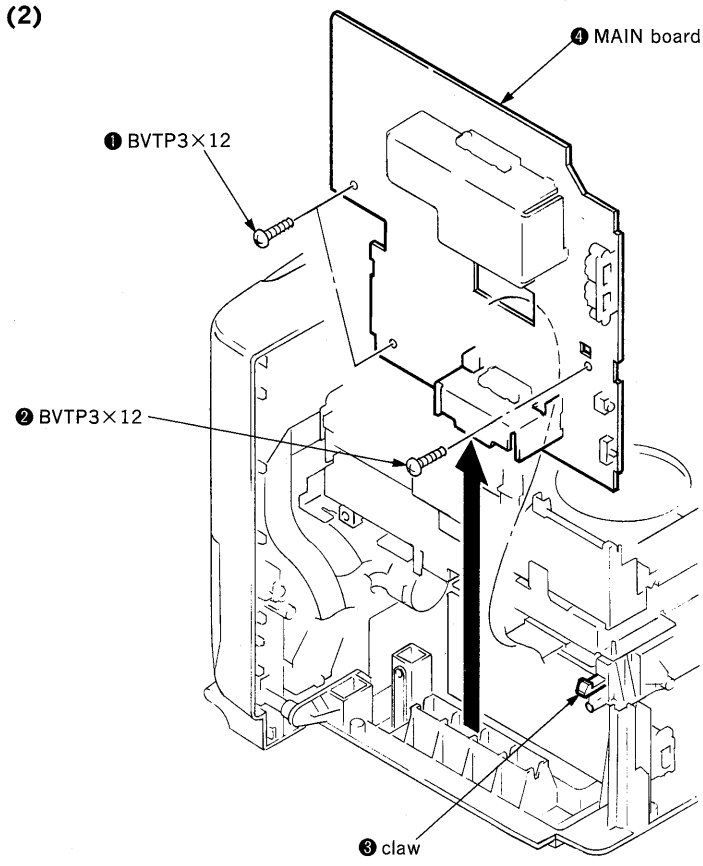
1. REAR CABINET



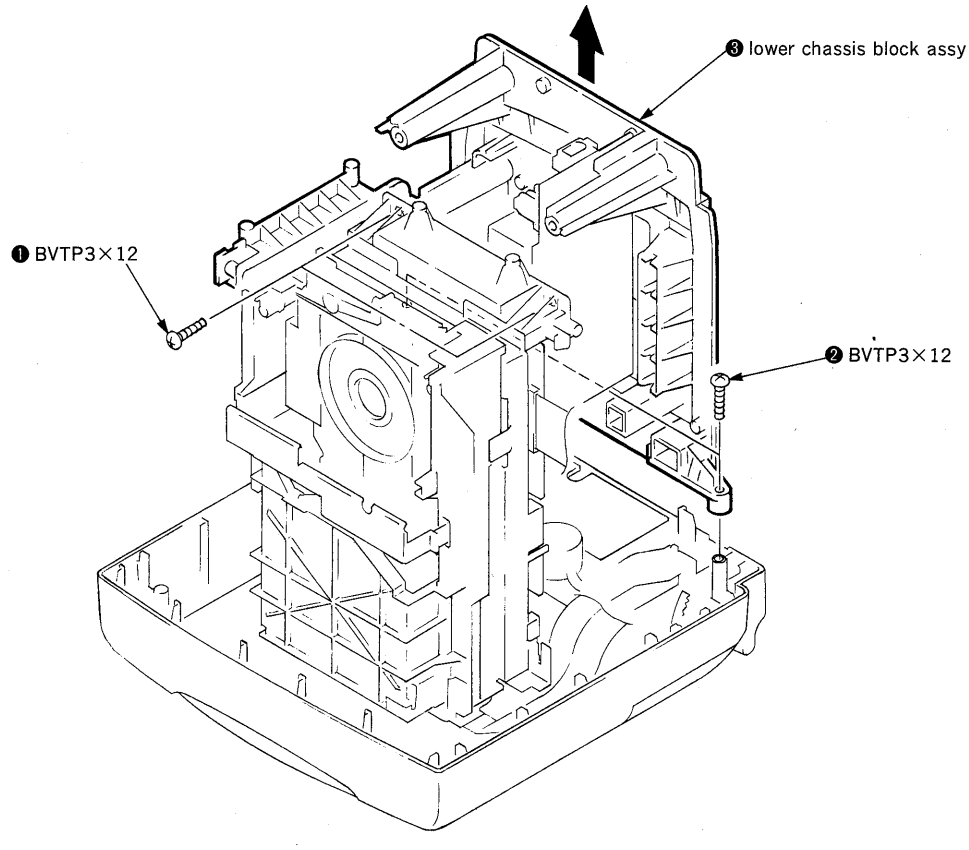
2. MAIN BOARD (1)



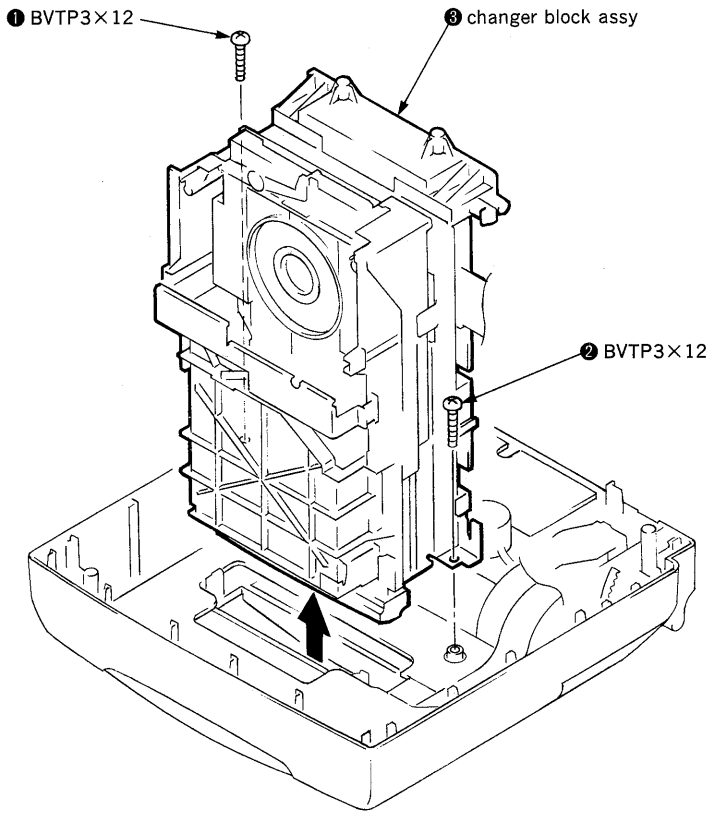
3. MAIN BOARD (2)



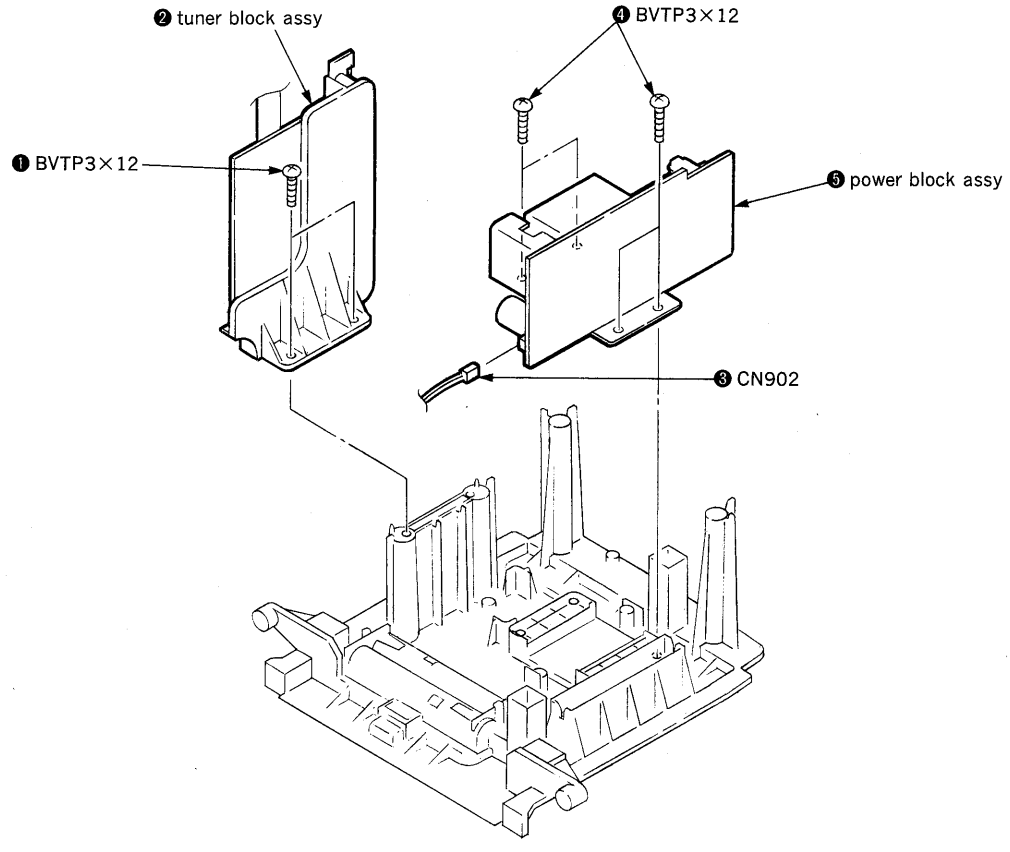
4. LOWER CHASSIS BLOCK ASSY



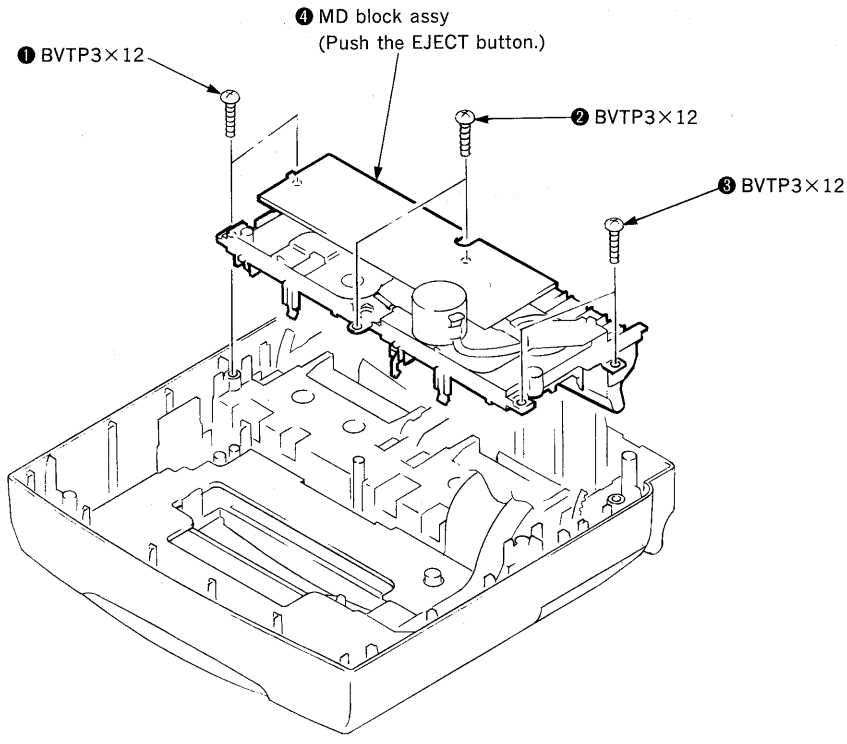
5. CHANGER BLOCK ASSY



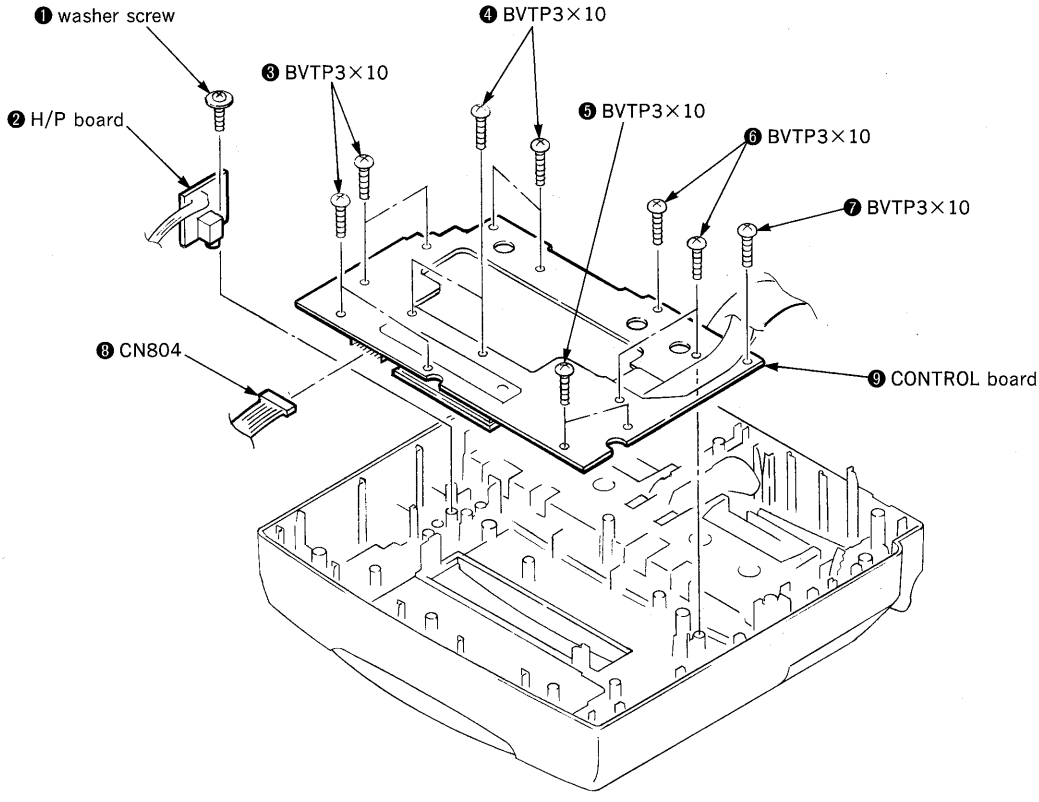
6. POWER BLOCK ASSY



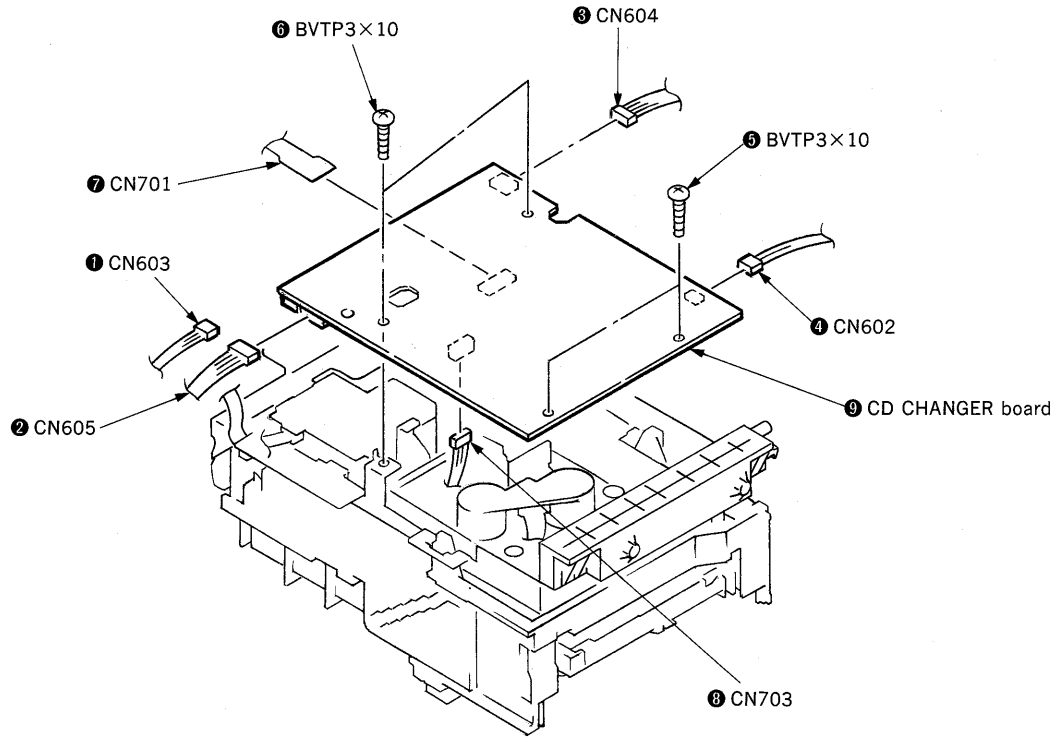
7. MD BLOCK ASSY



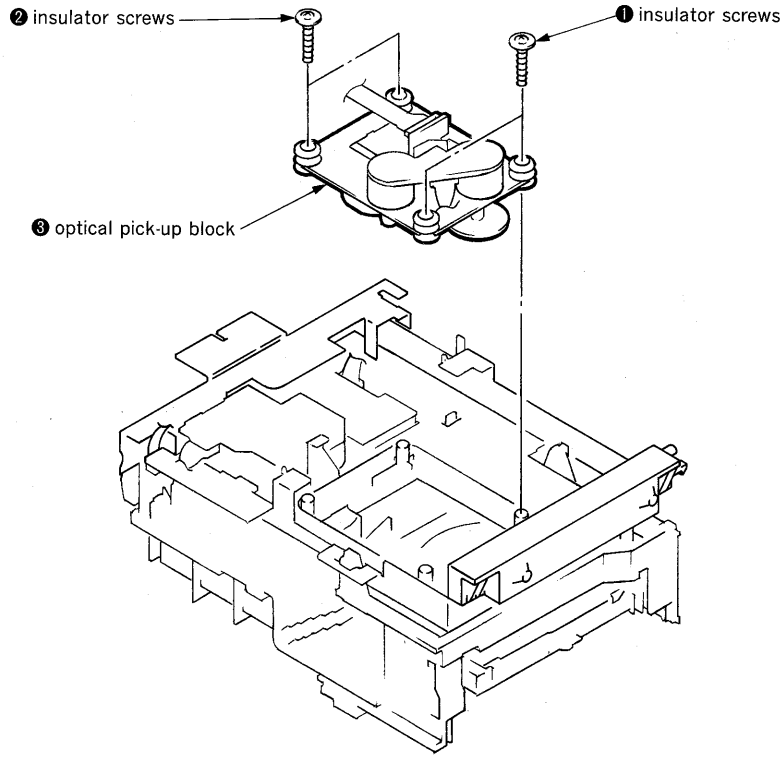
8. CONTROL BOARD



9. CD CHANGER BOARD



10. OPTICAL PICK-UP BLOCK



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